

# A pilot study of group based compassion focused therapy for low weight eating disorder patients

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# A PILOT STUDY OF GROUP BASED COMPASSION FOCUSED THERAPY FOR LOW WEIGHT EATING DISORDER PATIENTS

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## ABSTRACT

This study looks at the effects of an extended group therapy programme (47 sessions) using Compassion Focused Therapy (CFT) for female individuals with low weight eating disorders. In particular, the aim is to evaluate the principle that CFT used in an extended format is more effective in terms of weight restoration and reduction in core psychopathology than the standard CFT treatment (27 sessions).

Six patients participated in the group therapy programme. Standardised self report measures were administered at regular intervals during the treatment process and were used to assess cognitive and behavioural aspects of eating disorders as well as social functioning and wellbeing. Body Mass Index (BMI) was also regularly measured to assess the impact of treatment on weight restoration.

There were statistically significant improvements in Body Mass Index, for all patients increasing in weight during the programme. Other statistically significant improvements were found on the EDE-Q, SEDS, CORE and with self-compassion. These results were significant despite the small sample size of the study.

This study shows significant improvements in the psychological and physical wellbeing of individuals with a low weight eating disorder when provided with an extended group treatment programme using CFT. Due to the current limited pool of therapies available for this client group, there is a need for further research into this new treatment intervention.

## DEDICATION

I would like to dedicate this work to an amazing lady, Karen Muntz-Drew who will sadly never see this work, but inspired many eating disorder sufferers to recover with her kind words, warmth and compassion. Karen you will forever be an inspiration, rest in peace.

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Thank you.

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# CHAPTER 1

## 1. INTRODUCTION

### 1.1 - Background:

This dissertation explores the effects of Compassion Focused Therapy (CFT) on female patients diagnosed with an eating disorder at low weight and will identify the importance of an extended group therapy for this particular patient population. There are good reasons for assuming that CFT can play an important role in the treatment of eating disorders due to previous research, as will be defined later. However, the lack of research into the impact of CFT in an extended group therapy format and with this particular patient population, requires further exploration. There is a lack of literature and research exploring alternative treatment pathways for this complex patient population, despite eating disorders being hugely debilitating for the sufferers and placing a significant cost burden on the health service.

### 1.2- What are Eating Disorders?

Eating Disorders refer to a group of conditions defined by abnormal eating habits that may involve either insufficient or excessive food intake to the detriment of an individual's physical and mental health (Hudson, Hiripi, Pope & Kessler, 2007). They can be further defined by the presence of behaviours aimed at controlling body weight and shape (American Psychiatric Association; APA, 2000). They are amongst the most incapacitating of psychiatric conditions (Klein & Walsh, 2003). This dissertation focuses on eating disorders at very low weight and the distinctive needs of this complex client group. The diagnostic criteria for the eating disorders has been developed over time, and can be defined as four separate diagnoses: 1)Anorexia Nervosa (AN); 2)Bulimia Nervosa (BN); 3)Binge Eating Disorder (BED); and 4)Eating Disorder Not Otherwise Specified (EDNOS), (APA, 1994). In conjunction with these diagnoses additional diagnostic categories have been proposed due to distinctive differences in mental health presentation within the clinical setting. These include Multi-Impulsive Bulimia Nervosa (MI-BN) which incorporates the often seen co-morbid symptoms of Borderline Personality Disorder, including self harm,

overdosing, petty crime and sexual promiscuity (Lacey & Mourelli, 1986). This diagnosis is due to appear in the Diagnostic and Statistical Manual V (DSM-V) due for release in 2013. For the purpose of this dissertation AN, BN and EDNOS will be the focus.

Anorexia Nervosa (AN):

AN is one of the most severe illnesses affecting young women and adolescents (Beumont & Touyz, 2003). AN is characterised by extreme weight loss due to behaviours including:

*restriction of dietary intake

*laxative misuse

*excessive exercise

*self induced vomiting,

The above occuring in conjunction with an intense fear of gaining weight (Crisp, 1967), refusal to maintain a normal body weight (Hay et al, 2009), an ego syntonic pursuit of thinness, which is a psychological term referring to behaviours, values and feelings that are in harmony with or acceptable to the needs and goals of the ego (Garfinkel & Garner, 1982), and a powerful influence of body shape and weight on self-esteem (Bruch, 1962).

Low Body Mass Index (BMI) (measured as $Kg/m^2$) is the most obvious physical manifestation of low weight eating disorders, particularly AN. However, the psychological aspects have also been focused upon in the research literature for decades. Weight loss can result in the loss of menstruation in females (Amenorrhoea) as well as other medical complications such as gastrointestinal problems, endocrine abnormalities, kidney problems, low bone density (Osteopoenia; Osteoporosis), dental erosion, paraesthemia and polyuria (Klein & Walsh, 2003). A number of psychological features, many of which are related to semi-starvation, are often present including depression, irritability, obsessional thinking and compulsive behaviour, reduced concentration and alertness, and social

withdrawal (Beaumont et al, 1993). The DSM-IV (APA, 1994) criteria for Anorexia Nervosa particularly incorporates both physical (low weight – Body Mass Index <17.5 and amenorrhoea) and psychological features (fear of weight gain, low mood, overgeneralisation etc; see Table 1.1).

Table 1.1: *DSM-IV criteria for Anorexia Nervosa (APA, 2000).*



Bulimia Nervosa (BN):

BN was not described in the clinical literature until 1979 (Russell, 1979), yet recent literature shows a population prevalence rate of approximately 1% (Hoek, 2006). It is primarily characterised by repeated episodes of binge eating, that is, discrete periods of overeating during which patients experience a subjective sense of loss of control (Beaumont & Touyz, 2003). The episodes of binge eating (binging) are cycled with the use of compensatory behaviours to rid the body of unwanted calories (APA, 2000). These behaviours include fasting, self-induced vomiting, laxative misuse, diuretic misuse and excessive exercise (See Table 2).

Table 1.2: *DSM-IV criteria for Bulimia Nervosa (APA, 2000).*

Eating Disorder Not Otherwise Specified (EDNOS):

EDNOS is a grouping of symptoms which allows for an eating disorder diagnosis for patients who do not fit the strict criteria posed for AN and BN, yet still exhibit significant symptoms (APA, 2000). Turner and Bryant-Waugh (2004) report that more than 50% of clinical eating disorder presentations are best classified as EDNOS. Table 1.3 provides an overview of symptoms.

Table 1.3: *DSM-IV examples of EDNOS (APA, 2000).*



BN and EDNOS can also incorporate those individuals at low weight although less commonly at a Body Mass Index of <17.5 ($kg/m^2$). The diagnostic criteria are strict and an AN diagnosis can be compromised when females are prescribed the contraceptive pill or just fall outside the specific Body Mass Index criteria. There are currently many difficulties in current classification of diagnoses, particularly in using AN or BN as a trait diagnosis. A number of authors recognise that these diagnoses can be very fluid in severity, with a high crossover of symptom presentation over time. Braun et al, (1994), found that 25% to 33% of those with BN have a history of AN, whilst 54% of women with AN are likely to develop BN over a 15.5 year period, (Bulik et al., 1997). It would appear that the overarching category of “eating

disorder" remains relatively stable over time, regardless of initial diagnosis (Milos et al., 2005).

Figures suggest that community prevalence rates lie between 2-8 per 1000 (Van Hoeken, Lucas & Hoek, 1998), however, true prevalence is likely to be higher as many sufferers are likely to avoid inclusion. NICE (2005) showed that 1.6 million people in the UK were affected by eating disorders in 2004 and 180,000 (11%) of them were men. Wolf (1991) also that states while eating disorders are less common in men, approximately 10% of those suffering from eating disorders are male. Detection in healthcare services is estimated at 4-10 per 100,000 per year (Palmer, 2000). Recovery from an eating disorder is a complex and difficult task, as for those with low weight disorders, the disorder often remains for many a chronic and, often a treatment resistive problem. Crow and Peterson (2003) reported outcomes for anorexic patients showing little improvement in the second half of the past century. Due to the identified complex nature of the patient population being considered within this dissertation, and the need to provide current alternative treatment options for the reader to consider, the focus will be placed on current treatment.

In terms of psychological treatment the tendency has been to treat people with a diagnosed eating disorder as one group, therefore not splitting different diagnostic groups. This can lead to an oversight of important individual variations that can, in turn, compromise treatment (Waller, 1993). In recent years this has led to the development of a transdiagnostic approach to the treatment of eating disorders. The transdiagnostic approach recognises that many overlapping or common dimensions exist in eating disorders, and rather than treating them within the conceptual structure of a singular diagnosis, that treating them as a whole will yield important insights.

Outpatient treatment is not always possible, as high mortality rates, low recovery rates and health risks, such as heart failure, as well as treatment failure often make inpatient treatment necessary. Although this study focuses on the use of CFT in the treatment of eating disorders, it is important to note that within both the outpatient and inpatient setting, Cognitive Behavioural Therapy (CBT) is currently the leading

therapy in eating disorders, achieving clinically significant improvements in about 50% of patients (Wilson, 1996). However, NICE (2005) identified little success of current psychological therapies including CBT with eating disorders, particularly for those individuals at low weight. Some improvements in terms of weight gain and recovery at the end of treatment were also identified but they acknowledged that these improvements were not sustained suggesting that outpatient psychological treatment for individuals with AN should focus on: "both eating behaviour and attitudes to weight and shape, and on wider psychosocial issues with the expectation of weight gain" (NICE, 2005 p.23)

Therefore time should be given for weight restoration and reduction of physical ill health alongside core psychopathology (Fairburn, 2008; Waller et al, 2007). Currently weight gain is relatively uniform (and limited) across therapies in many existing trials (Channon, de Silva, Hemsley & Perkins, 1989; McIntosh et al, 2005; Dare et al, 2001).

**1.3- Brief Synopsis of relevant literature:**

Roth and Fonagy (1996) undertook a major review of evidence-based treatments for eating disorders. They identified major methodological weaknesses in studies of Anorexia Nervosa and concluded that there was a: "striking lack of systemic investigation of the efficacy of behavioural and cognitive-behavioural methods for anorexics" (p.182). Roth and Fonagy (1996) concluded that treatments for Bulimia Nervosa were more promising, with an effective symptom reduction in two thirds of patients. It was, however, noted that only one third were symptom free by the end of the follow-up period of treatment. Many other psychological therapies such as Cognitive-Analytic Therapy, Interpersonal Therapy, and Supportive-Expressive Psychotherapy also appeared to show comparable treatment effects to that of Cognitive Behaviour Therapy (CBT). This review and the need for a growth in evidence based practice led to an increase of research within the field of eating disorders, with a particular emphasis on CBT.

Almost ten years later, a review conducted by NICE (2005) also noted methodological difficulties in eating disorder studies and identified limited success with current psychological therapies including CBT in eating disorders, particularly

for those individuals at low weight (BMI 14.5-17.5). However, some improvements in terms of weight gain and recovery at the end of treatment were identified, but these improvements were not sustained. The outcomes that NICE (2005) identified for BN were more encouraging. It was recommended that CBT for BN (CBT-BN) was the treatment of choice. However, despite advances in the development of CBT-BN remission rates for BN had improved only slightly from 33% to 37% since the original review by Roth and Fonagy (1996). The message consistently received is that the evidence for effective treatments for AN and eating disorders at low weight is very limited. The CBT approaches for BN are more successful, however, remission rates remain low.

More recent research into the efficacy of CBT with eating disorders has shown significant improvements in treatment outcome (Agras et al, 2000; Fairburn et al, 2009). However, the treatments only led to remission for around 50% of patients at up to 60 weeks follow-up.

Another review was completed by Bulik et al. (2007), who systematically reviewed evidence on efficacy of treatment for AN, by searching six major databases for studies on the treatment of AN from 1980 to September 2005. They identified 32 treatment studies involving only medications, only behavioural interventions and a combination of the two combined treatments. It was found that the literature on medication treatments and behavioural treatments for adults with AN was sparse and inconclusive. Bulik et al. (2007) also found that CBT may reduce relapse risk for adults with AN after weight restoration, however, the efficacy of CBT in those individuals that were underweight remains unknown. they suggest that evidence for AN treatment is weak and more attention needs to be paid to retention of patients in research trials and standardization of treatment measures.

Due to the limited effectiveness of outpatient psychological treatments for both Anorexia Nervosa and Bulimia Nervosa (with little being known regarding EDNOS), particularly those at low weight, patients often require inpatient admission to hospital either within a specialist eating disorder hospital or a general medical ward. These inpatient stays are often very costly, both emotionally for the individual

themselves as they can be away from friends and family for a period of 8 months to 2 years, and also for the National Health Service (NHS) with significant fiscal implications. It is therefore vital that further research is carried out with the aim of finding a psychological treatment that will enable the individual with an eating disorder to recover both in terms of physical health but also psychologically.

This underpins the current research described in this dissertation. The aim is for a new form of treatment to be added to the NICE guidelines for the treatment of eating disorders and that patients will be able to receive an effective treatment within the community setting.

**1.4 – Conceptual underpinnings for the study:**

More research has been carried out into the efficacy of CBT for eating disorders in recent years and alongside this the development of transdiagnostic approaches to eating disorder treatment (Fairburn, Cooper & Shafran, 2003) Transdiagnostic approaches refer to use of exactly the same treatment approach regardless of an individual's specific type of eating disorder . This approach was developed for two main reasons first the need to extend the CBT model of eating disorders to address additional maintaining mechanisms and second, to encompass the similarities between eating disorder diagnoses and acknowledge the fact that individuals suffering from an eating disorder frequently move between diagnoses during the eating disorder life cycle. The new developments in CBT (Fairburn et al, 2009) have been based on a transdiagnostic approach, however, treatment protocols excluded patients with a Body Mass Index lower than 17.5.

There have also been new understandings of the aetiological, maintenance and relapse risk factors associated with eating disorders, particularly shame and pride, self-directed hostility and self-compassion (Goss & Allan, 2010). These newly identified factors within eating disorders mean that psychological therapies need to adapt to ensure these factors are accounted for during the treatment process.

### 1.5 – What is Compassion Focused Therapy?

Compassion Focused Therapy (CFT) (Gilbert, 2000; Gilbert & Proctor, 2006) was developed as an integration of attachment theory, affective neuroscience, CBT and Mahayana Buddhist practice. According to Gilbert (2010) it has been known for a long time that the link between cognition and emotion is complex. Panksepp (2007) outlines clear neurochemical differences in these processes, whilst Stott (2007) identifies a distinction in the types of information processing systems that distinguish emotion and cognition. In practice, patients are often able to realise their thinking is negative and to formulate alternative thought processes, however, they are often not able to connect with them, believe them or apply them. Gilbert (2010) suggests that there needs to be a focus on the feelings of alternative thoughts rather than the content and this realisation began the journey resulting in Compassion Focused Therapy (CFT). Gilbert (2000) developed the process of doing therapy with a compassion focus and "developing inner warmth", (Gilbert, 2007 p. 107). Research also suggests that teaching an individual to develop self-compassion can reduce shame and self-criticism, as well as lead to improvements in other psychiatric symptoms (Bueno, 2011). Over the past 15 years Gilbert has focused on compassion as being an antidote to shame and self-criticism and as a focus for therapeutic intervention. CFT is not a discrete therapy, but rather offers another approach to working or organising ideas for practitioners of all theoretical backgrounds who are presented with the transdiagnostic issue of shame and self-criticism (Bueno, 2011). Gilbert (2010) further, identifies that there are at least three types of emotion regulation systems: 1) the threat detection and protection focused; 2) the drive and excitement focused; and 3) the contentment, soothing and affiliative focused. This three circle model can be seen in fig 1:

Figure 1: Three Circles Model. Gilbert (2009). The Compassionate Mind.



CFT focuses on a three system approach and organises its psychological formulations around them. The process of CFT sets out to rebalance the systems with a particular focus on activating the afiliative system in order to regulate the others. Gilbert (2010) suggests that CFT takes the view that the afiliative system is poorly accessible in people with high shame and self-criticism and that for this population the "threat" system dominates their inner and outer worlds. The aim of CFT is to orientate an individual towards a compassionate self identity to allow them to be able to self-sooth and to reduce self-criticism and core mental ill health symptomology. This is achieved in therapy through a combination of skills based learning, imagery, and behavioural experiments which all have a compassionate focus.

**1.6 - Compassion Focused Therapy for Eating Disorders (CFT-E):**

Goss and Allan (2010), state that CFT-E has been developed over the past five years to combine the best elements of CBT for eating disorders and a number of other promising eating disorder treatments, underpinned by an understanding of the benefits of developing self-compassion. It takes CFT as a model and incorporates etiological and maintaining factors consistent with eating disorders. It also incorporates taught skills which help to address eating disordered thoughts, feelings and behaviours whilst also acknowledging and addressing the essential need to normalize eating and restore weight. Within the Coventry Eating Disorder Service,

CFT-E is currently used as a twenty seven session group treatment programme for adults aged 18-65 years in a transdiagnostic format.

In terms of the 'three circles' model, Goss and Allan (2010) suggest that eating disordered behaviour can be used to manage threat, by avoiding a feared event (e.g. rejection due to weight gain) or interrupting a painful internal emotional experience (as can occur during a binge). CFT-E expands on the 'three circles' model of affect regulation and suggests that 'pride' in behaviours designed to regulate affect may also play an important role in regulating threat. Individuals with an eating disorder tend to live in a world of internal ongoing threat where they are unable to access the soothing system. CFT-E targets these factors, offering interventions to help individuals to become more self-soothed and self-compassionate. Figure 2 shows the adapted 'three circles' model for CFT-E.

Figure 2: CFT-E Model of Affect Regulation in Eating Disorders (Goss & Gilbert, 2009).



**1.7 - Rationale for the study:**

Although individuals with eating disorders at low weight make up only a small proportion of eating disordered patients, Morris (2008), reports that mortality in Anorexia Nervosa is ten times higher than that of the general population. Mortality is also the highest of any psychiatric disorder (Herzog, 1997; Crisp, 1992). This statistic

emphasises the importance of the need for further research into developing effective prevention and treatment

Compassion Focused Therapy (CFT) was developed to help people with high levels of shame and self-criticism. It has been successfully used with a number of different client groups, including people with depression (Pauley and McPherson, 2010) and psychosis (Mayhew and Gilbert, 2008). Coventry Eating Disorder Service (CEDS) has pioneered the development of a specially adapted form of this treatment for people with an eating disorder (CFT-E). A clinical audit of the data for this programme (Gale et al, 2012) indicated that it is an effective new treatment and at least as successful as the NICE guideline recommended treatment for people with eating disorders (Goss, 2010). However, in common with other treatments for eating disorders, patients who were lower in weight did less well and to date there are no effective outpatient treatments for these patients. The current study uses a longer period of treatment specifically designed to meet the needs of such lower weight patients. The aim is to address the greater difficulties these patients face when trying to reach a normal weight and develop a healthier eating pattern as well as the complex psychological process that underlie their eating disorder. At present the research literature for CFT with eating disorders is limited. Mayhew and Gilbert (2008) identify the need for future research in pitching CFT against other therapies, particularly in clinical trial format. Pauley and Mcpherson (2010) looked at patient experience of working with compassion and self-compassion in a sample population of individuals diagnosed with anxiety or depression and concluded that CFT required further study and discussion and highlighted the need for a focus on recruitment particularly when using a small study sample. Gilbert and Procter (2006) found that CFT had a significant impact on depression, anxiety, self-attacking, feelings of inferiority, submissive behaviour and shame.

Consequently, it is hypothesised that CFT is effective for people with an eating disorder at low weight. Gale et al (2012) concluded that CFT was more helpful to individuals with a diagnosis of Bulimia Nervosa rather than Anorexia Nervosa and those with eating disorders at low weight. Those individuals with a low weight eating disorder have a Body Mass Index of less than 17.5 and therefore it was also

hypothesised that a 47 session CFT group therapy programme is more effective than the 27 session programme for the low weight eating disorder population. The focus of the group therapy programme being to allow extended time for weight restoration and reduction in key eating disorder behaviours and psychopathology.

**1.8 - RESEARCH QUESTIONS, AIMS AND OBJECTIVES:**

**-Research Questions:**

- Is Compassion Focused Therapy (CFT) effective in the treatment of individuals with low weight Eating Disorders?
- Is a 47-session CFT group programme more effective than a 27 session programme in low weight Eating Disorders?

**-Research Aim:**

- to explore whether CFT is effective for individuals with a diagnosed eating disorder at low weight (Body Mass Index 14.5-17.5)
- to establish whether the extended version of this programme is more effective for both weight restoration and a reduction in eating disorder symptoms than the current standard treatment (27 session) programme offered at Coventry Eating Disorder Service (CEDS).

**-Research Objectives:**

- To discover whether CFT is an effective treatment for individuals with an eating disorder at low weight.
- To ascertain whether a longer period of CFT treatment is more effective for weight restoration and reduction in eating disorder symptoms.
- To make recommendations for future practice.

Effectiveness will be determined via quantitative data, with scores being collected from self report measures and compared over relevant time points as outlined in Chapter 3. Qualitative data will also be collected via a structured

interview at treatment end. This will help to add validity to quantitative findings and to provide an insight into the patient journey.

**1.9 – Summary:**

Difficulties exist in the current recommendations for treatment of a low weight eating disorder, with inpatient care often being the only option available to the patient. It is therefore crucial that research is completed focusing on alternative treatment pathways for this patient population. CFT has been developed to help treat a number of different mental health problems, including depression, anxiety and psychosis and research shows that it is an effective treatment approach. It has therefore been hypothesised that this therapy will also be an effective treatment for patients with a low weight eating disorder. The development of CFT-E provides hope in the treatment of this complex disorder and places its focus on the core psychopathology of an eating disorder whilst recognising the crucial need for weight restoration.

# CHAPTER 2

# 2. LITERATURE REVIEW

## 2.1 – Compassion:

The literature review will focus on compassion as this concept underpins the research within this dissertation and piece of research. It is important to provide an understanding of 'compassion' to enable the intervention and the participant journey to be understood and explored. Treatment literature has been briefly summarised in Chapter 1, enabling this chapter to focus on 'compassion' and its emerging popularity as a new treatment intervention.

The term compassion can be defined as a sensitivity to the suffering of the self and others, with a commitment to alleviating it (Dalai Lama, 2001) therefore encompasses two themes; the ability to engage and acknowledge suffering and to identify and commit to relieving it. Compassion can involve a range of feelings, thoughts and behaviours such as those aimed to nurture, look after, protect, rescue, teach, guide, mentor, soothe and offering feelings of acceptance and belonging (Gilbert, 2010). Compassion Focused Therapy views our capacity for compassion as having evolved out of our capacity for altruism and caring behaviour (Gilbert, 1989) suggesting that altruism makes it possible to help others reach their goals and thus alleviating suffering. Compassion attributes and skills are elements that we can choose to develop in our relationships with others but also with our self. Gilbert (2010) suggest that active, compassion patterns our whole mind and being and referred to this as our compassionate mind. The last ten years have seen a major surge in exploring the benefits of cultivating compassion (Gilbert, 2007) with a particular focus on the use of compassionate imagery (Fehr, Sprecher & Underwood, 2009) and finding compassion for others produces changes in the frontal cortex, immune system and overall wellbeing (Lutz, Brefczynski-Lewis, Johnstone & Davidson, 2008). This goes to some way to support the theory that using these techniques can improve mental wellbeing and has led to research focusing on

particular mental health problems and diagnoses and being adapted into specific therapeutic approaches.

Compassion is also a key feature in nursing with current legislation highlighting the need for compassionate care (DOH 2012) and with recent reports (Francis, 2013 & CIPOLD, 2013) featuring compassion as a term requiring more focus in order to achieve acceptable, quality care. According to the DOH 'As health and social care changes what does not alter is the fundamental human need to be looked after with care, dignity, respect and compassion' (2012 p 5).

The focus is on six fundamental values; care, compassion, competence, communication, courage and commitment. These key nursing concepts are transferable with similarities being seen within the field of compassion research, placing the participant at its core and ensuring a structured framework encompasses. For the research used in this dissertation, the treatment itself is compassionate, with other key attributes being frequency, standards, continuity, protocols, records and accountability.

**2.2 – Structure:**

The literature review focuses on literature relating to Compassion Focused Therapy (CFT) Compassionate Mind Training (CMT) and Compassion approaches to understanding common themes which exist within the realms of an eating disorder, those being Self-Criticism and Self-Judgement. The literature was reviewed to identify efficacy of factors of treatment on core mental health symptomology with identified outcomes, types of methodology chosen and its effectiveness and the sample populations used. These objectives were used to enable the identification of current gaps in research and to help support the rational for the study.

The data sources used were EBSCO HOST, MEDLINE, PUBMED, NHS EVIDENCE and PSYCHINFO. Key search terms included *Compassion, Compassion Focused Therapy, Self-Compassion, Compassionate Mind Training* and *Compassion with eating disorders.* In addition searches of the internet were carried out using a number of different search engines. The bibliography lists of useful references were also checked for further relevant publications. At present the research literature for CFT

within the field of eating disorders is limited therefore the search field was extended to incorporate the effects of CFT on other mental health symptoms and diagnoses, with the aim being to focus on similarities in design, methodology and research aims. Studies from 2000 to the present were reviewed, due to CFT being a new psychological treatment approach. There was a dearth of grey literature[1], possibly due to its relatively new status within the therapy division, therefore the focus is on peer reviewed journal publications

[1]The term Grey Literature refers to research that is either unpublished of has been published in either non-peer reviewed journals or has been published for commercial purposes.

Studies were eligible for inclusion if they looked at the use of Compassion Focused approaches within the field of mental health and the effects on self-criticism and self- judgement. The criteria for inclusion remained broad due to the limited amount of suitable literature available. No language restrictions were applied, although the date range was limited from 2000 to present.

The search strategy generated many references of possible relevance, with the search term 'Compassion' achieving 2607 results, thus identifying a need for more specific search criteria. Compassion as a term has been present in literature for centuries, primarily within literature relating to Buddhism. Searches for the following terms, elicited a number of research literature responses, 'Compassion Focused Therapy' (34), 'Self-Compassion' (752), 'Compassionate Mind Training' (13) and Compassion with Eating Disorders (9). Titles and, where possible abstracts, were reviewed, hard copies of 35 papers were retrieved and examined in detail with 11 meeting the criteria for inclusion. (See Appendix 1 for search strategy).

**2.3 – The Literature:**

Appraisal:

The papers chosen for final review were those whose aim was to examine the impact and efficacy of compassion approaches on mental health and wellbeing and those which explored the themes of compassion. The 11 remaining articles were reviewed in depth, with each being rated on its aims, design and methodology, analysis and interpretation of results. The articles were also appraised in terms of their structure

and general stylistic features (clarity and transparency) and acknowledgement of shortcomings and limitations.

Data Synthesis:

Following appraisal of papers, a brief description and overview of each study was prepared in table format (See Appendix 2). Due to the varied nature of the papers being reviewed, specifically variations in therapeutic content and duration, design, sampling methods and other heterogeneous features, meta-analysis was not possible. A narrative critique of papers follows.

Results:

Of the 11 articles, 1 was a Randomised Controlled Trial (RCT), 3 Non-Randomized Controlled Trials, 1 Interpretative Phenomenological Analysis (IPA), 1 Questionnaire Study (Correlational Design) with a patient population, and 5 Questionnaire Studies with student populations.

The Research:

Student Samples:

Research is often conducted using student populations, particularly where questionnaire construct or feasibility studies are concerned. However, there need to be certain considerations such as the potential for undue influence or unintentional pressure to participate, where research is being conducted by staff members who hold an existing relationship with the student e.g. lecturer. The idea being that they are a captive audience needs careful consideration. Studies using student samples have been included to identify how compassion is tolerated and accepted within a normal population, and due to the large sample size providing a more powerful outcome.

Zabelina and Robinson (2010) conducted a Randomised Controlled Trial (RCT), with the aim of measuring the effects of self-compassion on creative originality among self-judgemental individuals. This is of interest as it sets out to show the powerful nature of self compassion and the impact it can have. The sample consisted of 86 participants (55 male and 31 female) and although all participants were identified as undergraduate psychology students, no age range or mean age was provided.

Participants took part to achieve course credit; therefore this may have impacted on the results and been a potential limitation of the study. The participants' mental health status was unknown and the ethnicity was not reported.

Five questionnaire studies were also completed with student populations (Neff, 2003 ; Neff and McGehee, 2010; Gilbert et al, 2008; Gilbert et al, 2006 & Gilbert et al, 2004), focusing on the construct of self compassion, examining levels of self compassion, positive affect regulation and to investigate self-criticism and self-reassurance. The sample size of these studies ranged from 197 to 391, with a total of 1559. A range of ages were represented: Neff (2003) focused purely on young undergraduate adults with a mean age of 20.91; Neff and McGehee (2010) studied adolescents with an age range of 14 to 17 years (mean 15.2 years) and a comparison group of young adults with an age range of 19 to 24 years (mean 21.1 years); Gilbert et al (2008) included undergraduate students with an age range of 18 to 56 years (mean 23.31 years); Gilbert et al (2006) studied undergraduate students also, with an age range of 18 to 51 years (mean 23.39 years). Gilbert et al (2004) did not specify an age range but provided a mean age for the sample of 27.7 years. Gilbert et al (2004) reported 100% female sample, whilst the other studies included both male and female participants, although each of the other studies had more females than males. The two studies conducted by Neff (2003; 2010) reported ethnicity but this was not reported in the other three studies.

Four studies focused solely on university settings (Neff, 2003; Gilbert et al, 2008; Gilbert et al, 2006 and Gilbert et al (2004), while Neff and McGehee (2010) focused on both university and high school settings. It is assumed Zabelina and Robinson (2010) conducted their study within a university setting, however, this was not reported.

Four of the studies administered self report measures on a single occasion to the participants (Neff, 2003; Neff and McGehee, 2010; Gilbert et al, 2008 and Gilbert et al, 2004). Gilbert et al (2006) utilised a classroom setting to place the participants in groups and participants completed one set of self report measures before completing two visualisation exercises. After the visualisation exercises participants

completed a second set of self report measures. Similarly, Zabelina and Robinson (2010) asked participants to write about a negative event online that had made them feel bad about themselves for five minutes. Random assignment to control group or compassionate mind set group took place. The control group continued to write about the negative event and those assigned to the self compassion group received three additional prompts designed to encourage a self-compassionate orientation.

Zabelina and Robinson (2010) used the Abbreviated Torrence Test for Adults (ATTA) (Goff and Torrence 2002), the Self-Judgement Scale (Neff, 2003) and a Mood Likert Scale (no reference provided). The time points when each measure was administered were not provided. Gilbert et al (2006) presented data measured at two time points, pre visualisation and post visualisation. The remaining four studies presented data from a single time point. Two of the studies used the Self Compassion Scale (SCS) (Neff, 2003; Neff and McGehee, 2010). Three studies utilised the The Forms of the Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS) (Gilbert et al, 2004; Gilbert et al, 2006; Gilbert et al, 2008), which is unsurprising since the scale was developed by the lead author of each of the papers. Gilbert et al (2004) used another measure to also measure self-criticism: Levels of Self-Criticism scale (LOSC; Thompson and Zuroff, 2000)

All studies aside from Neff (2003) used at least one measure of general psychopathology / mood; including the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961) in Neff and McGehee (2010); the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977); Depression, Anxiety and Stress Scale (DASS 42; Lovibond & Lovibond, 1995).

Other scales used were the: Social Comparison Scale (Allan and Gilbert, 1995) in Gilbert et al (2006); Adult Attachment Scale (Collins and Read, 1990); Activation and Safe/ Content Affect Scale (Depue & Morrone-Strupinsky, 2005); The Comprehensive Affect and Personality Scale (COPAS; Lubin and Whitlock, 2000) all in Gilbert et al (2008).

Neff and McGehee (2010) used six other measures within their study: Spielberger State-Trait Anxiety Inventory- Trait form (Spielberger, Gorsuch, & Lushene, 1970),

The Social Connectedness Scale (Lee & Robbins, 1995), Maternal subscale of the Family Messages Measure (Stark, Schmidt, & Joiner, 1996), Index of Family Relations (Hudson, 1992), The Relationship Questionnaire (Bartholomew & Horowitz, 1991) and The personal uniqueness subscale of the New Personal Fable Scale (Lapsley et al, 1989).

For Zabelina and Robinson (2010), the study reaffirmed the value of a self-compassionate mindset for those individuals generally prone to self-criticism, through exploring the link between compassion and originality. The variables examined were predictive of creative originality but not its fluency. However, the methodology employed for the study was confusing with limited information being provided as to the procedure and the format of the intervention used. Self-Judgement and Self-Criticism as themes and terms were used interchangeably which made it difficult to determine the main aims and its link to the overall theme of creative originality.

Neff (2003) and Neff & McGehee (2010) found the self-compassion scale to be reliable with good construct validity. It was found to significantly predict mental health outcomes, with females having significantly lower self-compassion scores than males. Women also reported significantly higher levels of self-judgment, isolation and over-identification and significantly lower levels of mindfulness than men. Neff (2003) highlighted that the SCS is limited in its ability to accurately assess individual levels of self-compassion due to many people not being sufficiently aware of their own emotional experiences to realise the extent to which they lack self-compassion.

Gilbert et al (2004 & 2006) found strong inverse correlations between feeling self supportive and self-critical, with the degree of trait self-reassurance being adversely related to the power of a self-critical image and anger in the image. The need for more research into the variations of self-criticism and mechanisms for developing self-reassurance and the need for therapists understanding on forms and functions of self-criticism are also identified (Gilbert et al, 2004).

Gilbert et al (2008) presented findings which have implications for therapies, identifying that feelings of safeness and contentment may be especially linked to wellbeing.

Gilbert et al's (2008) study had multiple aims which made parts of the paper difficult and confusing to read. This was also the case with Neff (2003), where three studies were described making interpretation challenging. The design of the Neff and McGehee (2010) study was unclear and therefore the methodology could not be adequately assessed. Gilbert (2006) interspersed self report measures and visualisation exercises at a variety of different time points which also made the design of the study unclear. Gilbert et al (2004) successfully showed the interplay between quantitative and qualitative research methods, whilst recognising a significant limitation with the sample population and acknowledging that replication may be difficult.

Patient Samples:

Research using a patient population is vital for providing additional evidence and for ensuring effective, high quality care and intervention is achieved. However, these are often vulnerable populations who require robust research programmes in order to ensure safety. The challenges faced can be further seen in the following narrative.

Mayhew and Gilbert (2008) utilised a case series design to explore the understanding, acceptance and value of compassionate mind training (CMT) with psychotic voice hearers. Gilbert and Procter (2006) conducted a study to explore patient acceptability, understanding, abilities to utilize and practice compassion focused processes and the effectiveness of Compassionate Mind Training (CMT). Gilbert and Irons (2004) conducted a pilot study to develop a diary for monitoring self-attacking and self-soothing thoughts and Images. Pauley and McPherson (2010) conducted a study to explore the meaning and experiences of compassion and self-compassion for individuals with depression and anxiety, using Interpretive Phenomenological Analysis (IPA). Harman and Lee (2010), conducted a piece of quantitative research, exploring the suggestion that 'Shame' may contribute to the creation and maintenance of ongoing current threat as it attacks an individual's

psychological integrity, primarily focusing on the role of Shame and Self-Critical Thinking the development and maintenance of current threat in Post Traumatic Stress Disorder (PTSD).

The sample size of these trials ranged from 7 to 9, with a total of 25 and 18 completing the interventions. A range of ages were represented within the adult population: Mayhew and Gilbert (2008) had an age range of 23 to 64 years, Gilbert and Procter (2006) a range of 39 to 51 years (mean age 45.2). Gilbert and Irons (2004) did not specify age range or provide mean ages. All studies included both female and male participants within their studies, with the following ratios, Mayhew and Gilbert (2008) 6 males and 1 female (completers all male); Gilbert and Procter (2006) 4 males and 5 females (completers 2 males and 5 females) and Gilbert and Irons (2004) 2 males and 7 females (all completed). Pauley and McPherson (2010) had 10 participants (9 females and 1 male); six held a diagnosis of depression (3 with co-morbid generalised anxiety disorder) and 4 a diagnosis of a specific phobia. No details were provided as to severity, duration or phobia type. Participants were recruited from the researcher's clinical caseload, with this purposive sampling method being consistent with an IPA approach (Chapman & Smith, 2002). Participants were aged from 20 to 61 years with a mean age of 40 years. All participants were from a White British background. Harman and Lee (2010) presented a total sample size of 49 participants (26 male and 23 female), with an age range of 21-56 years (mean age 38 years). The participants were recruited from five outpatient services within the UK National Health Service (NHS). The inclusion for the study identified that participants were experiencing significant symptoms of PTSD. Participants were drawn from an NHS outpatient setting; however questionnaires were completed within the participant's home.

Mayhew and Gilbert focused on patients with a diagnosis of psychosis; Gilbert and Procter (2006) did not provide diagnosis but acknowledged that all patients had mental health problems that were major / severe, long term and complex; Gilbert and Irons (2004) included patients with a diagnosis of depression acknowledging all participants had suffered from depression for more than ten years. They also identified that a number of the participants had co-morbid difficulties such as social

anxiety, agoraphobia and Obsessive Compulsive Disorder. The ethnicity of participants was not reported in any of the studies. Purposive sampling was used within each of the studies in order to recruit the patients.

For Pauley and McPherson (2010) no details were provided as to where the participants were treated or where the research procedure took place. All other studies were conducted within the community setting with Mayhew and Gilbert (2008); focusing solely on an outpatient setting; Gilbert and Procter (2006) within a Day patient setting and Gilbert and Irons (2004) accessed their participants from an existing self-help depression group.

Within the study completed by Mayhew and Gilbert (2008) participants received individual CMT over 12 one hour sessions. The therapy was carried out by one female psychologist (author, Mayhew), allowing for a consistent intervention. Clinical supervision for Mayhew was provided by one male Psychologist (author, Gilbert). Gilbert and Procter (2006) provided CMT in group therapy format, providing two hour CMT sessions each week for twelve weeks. Gilbert and Irons (2004) provided 4 ninety minute sessions over seven weeks. As can be seen from the tables in Appendix 2, therapies varied in terms of format, length, therapist characteristics and provision of supervision. Key themes were similar, although not identical.

The study by Mayhew and Gilbert (2008) presented data measured at three time points, before and after CMT (six questionnaires at each data collection point) and again at six months follow-up. Outcome measures used were: The Belief About Voices Questionnaire (BAVQ) (Chadwick and Birchwood, 1995), a shortened version of the Forms of Criticism/ Self-Attacking and Self-Reassuring Scale (Gilbert, Clarke, Hemel, Miles, & Irons, 2004), a shortened version of the Functions of Self-Criticism/ Attacking and Self-Reassuring Scale (Gilbert et al., 2004), a symptom inventory, the SCL-90 (Derogatis, Rickels, & Rock, 1976, the Voice Rank Scale (Birchwood, Meaden, Trower, Gilbert, & Plaistow, 2000), and the Self-Compassion Scale (Neff, 2003). Participants also completed a weekly compassion diary throughout the duration of the study.

The study by Gilbert and Procter (2006) presented data at two time points, before and after CMT (seven questionnaires at each data collection point). Outcome measures used were: The Hospital Anxiety and Depression Scale (HADS) (Zigmond and Snaith, 1983), The Functions of the Self-Criticizing / Attacking Scale (FSCS) (Gilbert et al, 2004), The Forms of the Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS) (Gilbert et al, 2004), Social Rank Variables (Gilbert, 2004), Other as Shamer Scale (OAS) (Goss, Gilbert, and Allan, 1994), Social Comparison Scale (Allan and Gilbert, 1995), Submissive Behaviour Scale (Buss and Craik, 1986). Participants also completed a weekly compassion diary throughout the duration of the study. Gilbert and Irons (2004) used the HADS (Zigmond and Snaith, 1983) and participants were requested to complete a self-attacking and self-reassuring diary daily for two weeks and then weekly for the duration of the study (the duration of this is unclear).

Pauly and McPherson used a semi structured interview, developed by drawing on existing compassion and self-compassion literature. These components were then refined into specific questions and piloted with service users and colleagues. The feedback from this pilot work then helped shape the final research interview. The interview used the areas outlined by Neff's (2003) definition of self-compassion. Themes were developed using an iterative process consistent with an IPA methodology. Initial familiarization with the data from each transcript took place, with a summary of themes then being refined. Two processes were then used to enhance the reliability of the analysis, by gaining feedback from the participants, followed by the researcher and research supervisor. Nine themes were identified; 1) Compassion is a kind and active process, 2) Compassion is about being kind towards people, 3) Compassion requires action, 4) Self-compassion is meaningful and useful, 5) Self-compassion feels meaningful for me, 6) Self-compassion might help me with my depression / anxiety, 7) Being self- compassionate is difficult, 8) I'm not sure I can be self-compassionate, and 9) Negative impact of depression / anxiety on my ability to be self-compassionate.

Participants were sent out an opt-in pack for the research study and were asked to complete a number of questionnaires. No formal treatment was provided as the study was about exploration of shame, however it has been included within the

review due to the nature of the theme (Shame) being explored and its role within CFT and recognition as a symptom / side effect of an eating disorder. Outcome measures used were collected at a single time point and consisted of; The Post-Traumatic Stress Diagnostic Scale (PDS), (Foa, 1995), which assisted in the diagnostic process of PTSD; The Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979) which is a well established measure of depression and is known to have good reliability and validity (Beck, Steer, & Garbin, 1988); The Experience of Shame Scale (ESS), (Andrews, Qian, & Valentine, 2002), that assesses characterological shame, behavioural shame and bodily shame; The Forms of Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS), (Gilbert et al. 2004), which examines how self-critical / attacking or how supportive / reassuring people are when things go wrong for them, and The Functions of Self-Criticising / Attacking Scale (FSCS), (Gilbert et al. 2004), which examines the functions of why people self-criticise.

Mayhew and Gilbert (2008), found a decrease in positive symptom total for all participants as measured by the SCL-90, with particular significant decreases in their scores for Obsessive Compulsive Disorder (OCD), interpersonal sensitivity, depression, anxiety, paranoia and psychoticism. All participants BAVQ total scores were reduced and all participants' voices became less malevolent and persecuting. All participants had a reduction in their Inadequate-Self scores (Forms of Criticism Scale). The participants also began to hear more reassuring voices. The results of the study supported the premise that CMT is beneficial for individuals hearing malevolent voices, with CMT transforming the hostile nature of the voices with them becoming more reassuring and less persecutory and less malevolent. Gilbert and Procter (2006) found significant reduction in both HADS, Anxiety and Depression scales. Many participants found their self-critical thoughts became less frequent, less powerful and less intrusive. There was a significant drop in self-persecution but not in self-correction. There was a major reduction of feelings of inferiority, with social comparison scores moving into a non-clinical range. Gilbert and Irons (2004), found a small reduction in scores for self-criticism although non significant, however there were significant findings in the increase in the ease of generating compassionate images and soothing oneself in a self-critical situation.

For Mayhew and Gilbert (2008) the study had a very small sample size, however the appropriate choice of case series design allowed for this. Half of the participants did not complete the study; however this was largely due to the nature of the client group within the sample population. There was also a need for more frequent administration of the self-compassion scale (as noted by the author) to accurately measure growing development of self-compassion. For Gilbert and Procter (2006) no formal diagnosis was given to any of the participant's, therefore recognition of initial symptoms may have been skewed. It was also recognised by the author that the study was a pre-trial study therefore acknowledging that there was no control group in situ. Gilbert and Irons (2004), showed very strong sampling methodology with participants being stringently screened, with the only weakness being incomplete data from one of the nine participants. For Pauley and McPherson (2010) the recruitment method is of concern with participants being recruited from the researcher's case load, although consistent with IPA methodology it is not clear who completed the interview for analysis, therefore a level of bias can be assumed.

For Harman and Lee (2010) hypotheses of the study were largely supported, with Shame being shown to have a significant positive correlation with self-criticism and a significant negative correlation with self-reassurance. This appeared to further support the need for further research looking at how shame is targeted within therapy for PTSD. This is a very current field within eating disorders with Goss and Allan (2010) exploring the impact of Shame and Pride on eating disorders. There was a significant lag between data collection points as a number of participants (number not noted by the author) had filled out some of the measures (again specific measures not noted) during the assessment process, rather than within the timeframe of the study. The author therefore noted a time range of 0-13 week's difference in data collection with a mean of 3 weeks being specified. This lag and difference in data collection may have impacted on the results and introduced other variables such as environment report measures completed within, which weren't dealt with in the discussion.

**2.4 – Summary:**

This chapter aimed to review the literature available for CFT and Compassion and its effects on mental health and wellbeing.

Taken together, findings suggest a role for CFT and the use of compassion within the field of mental health; however more research is needed in clinical trial format, whether randomised or non-randomised to ascertain specific results and the impact of CFT in eating disorders and other mental disorders / mental illnesses.

Zabelina and Robinson (2010) looked at the induction of a self-compassionate mindset, reaffirming its value and identifying a possible link between compassion and originality. This study shows the power of using Compassion and its impact on thought processes. Whereas Mayhew and Gilbert (2008) looked at acceptability of compassion focused approaches, whilst Gilbert and Irons (2004) focused on the development of a diary to monitor self-attacking and self-soothing thoughts and imagery. Studies also found a decrease in mental ill health, symptomatology, self-critical thinking, persecutory ideation and an increase in compassion, soothing and the ability to conjure positive imagery (Mayhew & Gilbert, 2008; Gilbert & Procter, 2006; Gilbert & Irons, 2004). Professor Paul Gilbert is a presence throughout many of the referenced articles, signifying his place as a founding member of the compassion focused school of thinking. This may impact on validity as same point of view is frequently used. The study within this dissertation looks at the development of self-compassion, the acceptability of the treatment and uses self monitoring throughout, with the aim of increasing compassion to reduce core mental ill health and self-critical thinking. The studies reviewed reinforce the use of these factors and in some way validate the current methodology of this study.

Some of the studies had small sample sizes (Mayhew & Gilbert, 2008; Pauley & McPherson, 2010; Harman & Lee, 2010), in common with the study for this dissertation. Useful information was gathered as to the importance of recruitment and design chosen when dealing with low numbers and the type of data analysis needed.

The studies reviewed showed validity for some of the self report measures used within this study (FSCRS; FSCS; SCS) however, Neff (2003) highlighted that the SCS

will be limited in its ability to accurately assess individual levels of self-compassion. This is thought to be due to many people not being aware enough of their own emotional experiences to realise the extent to which they lack self-compassion. Gilbert et al (2004) identified the need for more research into the variations of self-criticism and the mechanisms for developing self-reassurance and also placed an emphasis on need for therapists understanding on forms and functions of self-criticism. Gilbert et al (2008) presented findings which had implications for therapies, identifying that feelings of safeness and contentment may be especially linked to wellbeing.

The key findings encourage future research into compassion and its effects on mental wellbeing, by noting many significant results and themes, however acknowledging pitfalls and limitations which need to be reduced and remedied in further trials. The methodology as outlined in chapter 3 takes some of the key findings into account, particularly when looking at recruitment and acknowledging the potential limitations when looking at the complexities of the sample population being used and the small sample size.

# CHAPTER 3

## 3. RESEARCH DESIGN AND METHODOLOGY

### 3.1 – Methodology:

The research for this dissertation applies mixed methodology, therefore both quantitative and qualitative data are obtained and analysed. The mixed methodological approach was chosen to enhance validity and to provide a richness of data. According to Polit and Beck (2008) 'when a hypothesis or model is supported by multiple and complementary types of data, researchers can be more confident about the validity of their results. ……many areas of inquiry can be enriched and the evidence base enhanced through the judicious triangulation of qualitative and quantitative data' (p. 309)

The mixed method approach was also utilized due to the small sample of participants available for this study. It was also aimed at providing stronger evidence for a conclusion using convergence and corroboration of findings, thus applying the principle of triangulation. The first phase of the research study focused solely on the collection of quantitative data and the second phase then incorporated qualitative data collection through clinical interview, the aim being to add insight and understanding into the study topic, that may otherwise have been missed had a mono-methodological design been applied.

### 3.2 – Design:

This study set out to evaluate the effectiveness of an extended (47 session) CFT group for participants with an eating disorder at low weight (Body Mass Index 14.5-17.5). The assessment of eating disorder symptoms and behaviours and key psychological variables took place via standardised and validated psychometric

questionnaires (self-report measures) pre-treatment, at specific stages during treatment, immediately post treatment and at follow up. Outcomes were compared with the progress of similar clients (those at low weight) who completed a 27 session CFT for eating disorders programme (standard treatment) at Coventry Eating Disorder Service (CEDS). This clinical audit data was available from the existing CEDS database.

Those individuals who went through the group based treatment were then invited to consent to a clinical interview at the end of treatment. This provided qualitative data to support the quantitative data and allowed an insight into the patient journey and patient experience, enabling them to use their own language and understanding.

**3.3 - Participants:**

Participants were recruited from patients directly referred to Coventry Eating Disorder Service (CEDS). It was expected that there would be sufficient participants to adequately recruit to the study given previous referral to CEDS and for adequate power. However, in the event that further participants were required, patients would be recruited from patients referred to the Woodleigh Beeches Eating Disorder Service in Warwick (within the same NHS trust). All participants were aged 18 or above and had been referred for treatment of their eating disorder. Participants were recruited into the study if their Body Mass Index (BMI) was in the range 14.5-17.5 (severely underweight). Participants also receive regular medical and mental health monitoring at a frequency dictated by their symptom severity via CEDS and their General Practitioner (GP).

Participants were required to meet the inclusion \ exclusion criteria for the current CEDS out-patient treatment programmes.

- <u>Inclusion Criteria:</u>

All participants need to have been referred to Coventry Eating Disorders Service for an initial assessment.

They require a clinician assessed primary diagnosis of Anorexia Nervosa, Bulimia Nervosa or Eating Disorder Not Otherwise Specified (EDNOS) with a Body Mass Index (BMI) between 14.5 and 17.5.

- Exclusion Criteria:

-A body mass of 14.5 or less

-Recent history of self harm

-Suicidal ideation, planning or intent

-Illegal drug use

-Alcohol misuse

-Diagnosis of psychosis

-History of aggressive behaviour

-Intellectual disability that may prevent understanding of the psychological treatment programme.

If patients were deemed too physically unwell to engage in outpatient treatment they were referred for appropriate in-patient or day patient specialist eating disordered treatment following the usual operational procedures at CEDS.

If patients met any of the exclusion criteria then alternative care pathways were identified with clinician's ensuring that the patient's still received appropriate / quality care.

**3.4 - Recruitment to Study:**

A total of twelve patients were identified for inclusion into the study, eleven females and one male. They were identified using a purposive sampling method, with all new referrals being screened by the principle investigator. All patients underwent the CEDS standard assessment process with a two-stage assessment and feedback appointment. During the feedback appointment formal diagnosis was made and current weight and Body Mass Index identified. All twelve patients received formal

diagnosis and were then asked about taking part in the research programme or given the option of the standard twenty seven session programme (treatment as usual). All twelve patients expressed an interest in taking part in the research programme and were given a participant information sheet (see Appendix 4) which detailed the key aspects of the study. The potential participants were offered a further appointment 1 week later to discuss the study in more detail and to arrange to consent (see Appendix 5) if they wished to take part. This process was undertaken by the principle investigator / author of this dissertation to allow for consistency. Recruitment took place from March 2011 to May 2011.

The first patient identified, was female with a diagnosis of Anorexia Nervosa and a Body Mass Index of 15. The patient expressed an interest in taking part in the research study, however, during the consenting process the patient appeared physically unwell and dehydrated. It was also noted that the patient had a co-morbid alcohol misuse problem and thus was excluded from the study. The patient was involved in discussing alternative treatment pathways and was voluntarily admitted to a specialist inpatient unit for treatment of both her Anorexia Nervosa and her alcohol misuse.

Another patient identified, a male with a diagnosis of Anorexia Nervosa and a Body Mass Index of 17.4, opted to attend treatment as usual due to outside commitments and also delayed the start of his treatment because of A-Level exams. The patient was very honest about the fact that he felt the forty seven session programme was too long and too large a commitment for him to undertake at that time. The rationale for the extended version of the treatment was provided to him to ensure an informed decision was made.

A third patient, a female with a diagnosis of Anorexia Nervosa disengaged from the service despite numerous attempts to contact her, this highlighted the need for motivation to engage in treatment. The patient was monitored via her General Practitioner (GP) to ensure physical safety and to enable the minimisation of psychiatric risk.

Nine female patients consented to take part in the pilot study with an age range of 18 to 43 years, and treatment began with a four week psycho-educational programme in June 2011. The psycho-educational programme sets out to provide teaching regarding eating disorders to the patient, allowing for an increased knowledge base of the mental disorder they are experiencing and to also increase levels of motivation to continue on in treatment. The psycho-education material was delivered by the principle investigator and the lead Clinical Psychologist / Head of service at Coventry Eating Disorder Service. It was taught using a power point presentation and both audio and visual case studies and professionals talking of their experience of eating disorders.

Unfortunately one of the patients didn't attend the first session of the psycho-education programme and subsequently disengaged from the service, thus dropping out of the study. This patient subsequently contacted the service, however, because of her low Body Mass Index it was felt that she shouldn't wait for the next research intake but rather be included in treatment as usual.

Another patient completed the four session psycho-education programme, but during the post-psycho-education review felt that she wasn't ready for treatment. She was unable to accept the fact at that time that weight gain / restoration was a part of the eating disorder treatment. All patients are expected to achieve a Body Mass Index of 20 by the end of treatment. She then withdrew from the study and unfortunately from the service. This once again highlighted the need for strong motivation to get well as a further inclusion criteria for not only the research study, but rather eating disorder treatment in its entirety.

A total of seven female patients commenced the research pilot study and completed the first eight sessions including the questionnaire packs. Unfortunately the final patient to drop out of the study left post session eight. The patient left due to personal circumstance.

Six patients remained in the study to completion.

Table 2: Table showing recruited patients:

| PATIENT NUMBER | DIAGNOSIS | BMI ($kg/m^2$) | RECRUITMENT | COMMENTS |
|---|---|---|---|---|
| 001 | EDNOS | 15.5 | 18/03/11 | |
| 002 | EDNOS | 16.9 | 18/03/11 | |
| 003 | AN | 16.1 | 18/03/11 | |
| 004 | AN | 14.6 | 11/04/11 | WITHDRAWN |
| 005 | EDNOS | 16.7 | 13/04/11 | |
| 006 | AN | 15.4 | 18/04/11 | |
| 007 | EDNOS | 17.2 | 09/05/11 | |
| 008 | AN | 16.4 | 16/05/11 | WITHDRAWN |
| 009 | EDNOS | 16.1 | 06/05/11 | WITHDRAWN |

**3.5 - Measures & Materials:**

Diagnostic and demographic data were made available via clinical interview during the initial assessment process.

The following measures were administered at pre-treatment, post session 8, post session 20, post-treatment at session 40 and at 3 month, 6 month, and 12 month follow-up. All self report measures are already used within Coventry Eating Disorder Service for each patient referred to the service. A total of nine data collection points were identified. See procedure for description of treatment phases:

Table 3: Table showing data collection points throughout the treatment programme.

| | |
|---|---|
| Time Point 1 | Assessment & Second Stage Assessment |
| Time Point 2 | Pre Psycho-Education |
| Time Point 3 | Post Psycho-Education |
| Time Point 4 | Session 8 of Treatment |
| Time Point 5 | Session 20 of Treatment |
| Time Point 6 | Session 40 of Treatment |
| Time Point 7 | 3 Month Follow up |
| Time Point 8 | 6 Month Follow up |
| Time Point 9 | 12 Month Follow up |

**The Stirling Eating Disorders Examination (SEDS)**, (Williams et al, 1994)

The SEDS is an 80 item scale with eight subscales, four measuring core eating disordered behaviour and beliefs and four measuring factors associated with eating disorder psychopathology. Each item score is individually weighted based on two criteria; its severity (on a scale of 1-7) and its level of ambiguity. Higher scores on each subscale are indicative of increasing severity of symptoms. In the original standardization study the subscales had high internal consistency, Cronbach Alpha 0.83-0.92; (Williams and Power, 1995).

**The Eating Disorder Examination Questionnaire (EDE-Q)**, (Fairburn & Beglin, 1994).

The EDE-Q is a 38 Item scale, with four clearly defined subscales; Restraint, Concern, Shape and Weight and has evidence of good reliability and validity (Elder et al., 2006). It is used to immediately identify core eating disorder behaviours and cognitions. It also contains items to assess the frequency of important behaviours including binge eating and the use of extreme methods of weight control in reference to the number of days on which the behaviours occurred and the number of episodes. The questionnaire requests that patients reply in reference to the past 28 days.

**The Clinical Outcome Routine Assessment (CORE)**, (Evans et al, 2000)

The CORE is a 34 item scale focusing on four dimensions; subjective wellbeing; problems / symptoms; Life functioning and risk/ harm. The CORE meets the required standard for acceptable validity and reliability (Evans et al, 2002).

**The Neff Self-Compassion Scale (SCS)**, (Neff, 2003)

The Self-Compassion Scale is a 26-item scale that measures self-compassion (13 items) and coldness towards the self (13 items). The scale has good construct validity (Neff, 2003; Mayhew & Gilbert, 2008). Currently Neff is advising the scale be scored as a unitary measure.

**The Functions of the Self-Criticizing / Attacking Scale (FSCS) & The Forms of the Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS)**, (Gilbert et al, 2004)

The FSCS was developed by Gilbert et al (2004), and is a 21-item self-report measure to examine the reasons people might be critical of themselves. Factor analysis bore two separate factors: self-correction and self-persecution. The scale has good internal reliability with Cronbach alphas of 0.92 for both subscales (Gilbert & Procter, 2006).

The FSCRS was also developed by Gilbert et al (2004), and is a 22-item scale measuring the forms and styles of individual's critical and reassuring self-evaluative responses to a setback or disappointment. Factor analysis separated the self-critical Factor into two sub-factors; one focusing on feeling inadequate and defeated, called 'inadequate self', which consisted of 9 items with a Cronbach Alpha of 0.90 and the other focusing more on a sense of disgust and anger with the self called 'hated self', which consisted of 5 items with a Cronbach Alpha of 0.86. The self reassurance factor is an 8 item scale with a Cronbach Alpha of 0.86 (Gilbert & Procter, 2006).

**The Other As Shamer Scale (OAS)**, (Goss et al, 1994)

The OAS was adapted from the ISS (Cook, 1990), and designed as a trait self-report scale to measure vulnerability to believing that others negatively evaluate the self (Goss, Gilbert, & Allan, 1994). It is based on the concept of external shame. It is an 18 item scale, with the original standardization study showing high internal consistency (Cronbach Alpha, 0.93).

**The Internalised Shame Scale (ISS)**, (Cook, 1994, 2001)

The ISS was developed by Cook (1990) as a self report trait scale to measure global negative beliefs about the self. It is based on Kaufman's (1989) concept of "Internalised Shame. The ISS is a 30 item scale, with 24 shame items and 6 self-esteem items. Respondents are asked to rate on a 5 point Likert Scale (Likert, 1932) how often they experience particular thoughts and feelings. The original standardization study had high internal consistency (Cronbach Alpha 0.96 and 0.95 respectively), Cook, 1990.

Individual support was available to help patients complete questionnaires via CEDS routine service protocols. The questionnaires are time consuming, taking approximately 40 minutes to complete per questionnaire battery. This took a level of commitment on behalf of the participants in their completion. Each of the questionnaires / measures is used to identify specific psychopathology. Table 4 provides a brief description and overview of what is being measured. Although eight measures were used they each provide important data, therefore all were deemed necessary for the purpose of this research and within standard treatment.

Table 4: Table providing information regarding what each measure is being used for:

| SELF REPORT MEASURES / QUESTIONNAIRES | WHAT THE MEASURE IS BEING USED FOR |
|---|---|
| The Stirling Eating Disorders Examination (SEDS), (Williams et al, 1994) | The SEDS is used to evaluate eating disorder behaviour and cognitions. It is used to measure symptoms consistent with Anorexia, Bulimia and EDNOS. It assesses four core cognitive emotional factors; Assertiveness, Self Esteem, External Control and Self Directed Hostility. It also measures dietary behaviours and cognitions. |
| The Eating Disorder Examination Questionnaire (EDE-Q), (Fairburn & Beglin, 1994) | The EDE-Q measures eating disorder psychopathology. It focuses on Eating Restraint, Eating Concern, Shape Concern and Weight Concern. |
| The Clinical Outcome Routine Assessment (CORE), (Evans et al, 2000) | The CORE is a generic measure of psychological distress. It focuses on wellbeing, problems (symptoms), functioning and risk. It also provides a total score to measure changes in overall psychological distress. |
| The Neff Self-Compassion Scale (SCS), (Neff, 2003) | The SCS measures levels of self compassion and self coldness. |
| The Functions of the Self-Criticizing / Attacking Scale (FSCS), (Gilbert et al, 2004) | The FSCS examines the reasons why people might be critical of themselves. |
| The Forms of the Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS), (Gilbert et al, 2004) | The FSCRS measures the forms and styles of individuals critical and reassuring self evaluative responses to a setback or disappointment. |
| The Other As Shamer Scale (OAS), (Goss et al, 1994) | The OAS measures vulnerability to believing that others negatively evaluate the self. |
| The Internalised Shame Scale (ISS), (Cook, 1994, 2001) | The ISS measures global negative beliefs about the self. |

**Body Mass Index**

Body Mass Index (BMI, $kg/m^2$) was assessed weekly from session nine of the programme. In addition, it was planned that weekly data be collected from the Self-Compassion diary. This used a modified version of the diary developed by Mayhew & Gilbert (2008), (see Appendix 6). It explored triggers to and content of, frequency, intensity, power, intrusiveness, and duration of eating disordered and self-critical thoughts. How distressing these thoughts were, their emotional tone, and how easy / difficult participants find it to distract themselves from these thoughts were assessed. The diary also explored triggers to and content of self-compassionate thoughts, their frequency, intensity, duration, and intrusiveness. Also explored were their helpfulness in terms of being comforting and calming, and how easily participants could maintain these thoughts. Participants' successes in addressing their challenges of recovering from an eating disorder (including appropriate spacing of meals and energy intake, weight gain, and eating disordered thoughts and behaviour) were monitored via the diary.

In reality the diary was not adhered to because of the level of commitment the group therapy and the questionnaires, already placed on the participants. The diary was initially set at session 9, however, the participants failed to complete it despite prompts from the author / researcher and the clinical team. After discussion, it was decided that this diary was one task too many for the participants to complete. Thus the diary was removed from the study, however, it was acknowledged that the richness of data would be impacted upon as a result of this decision. This is discussed in Chapter 6.

**3.6 – Structure of the Treatment Programme:**

Prior to treatment all patients received a comprehensive multi-disciplinary assessment of their eating disorder, including the pre treatment assessment questionnaire battery outlined above. This process was the same for all CEDS patients. The assessment is a face to face interview carried out over two sessions (totalling three hours), and sets out to comprehensively assess an individual's eating behaviours and cognitions, alongside assessment of overall mental wellbeing.

Emphasis is placed on an holistic assessment approach to ensure all specific care needs are identified.

- Psycho-education: One session each week for four weeks, which provided taught information regarding eating disorders, what they are, how they start and how they are maintained. The idea of Psycho-education being to motivate the patient into carrying on in the treatment process. Table 3 shows a brief outline of the psycho-education programme.

Table 5: The psycho-education programme (Gale, Gilbert, Read & Goss, 2012)

Once patients had completed psycho-education, they were then offered standard treatment which is offered over 23 sessions (therefore 27 sessions total) and consists of the following:

Table 6: Composition of the Recovery Programme (Gale, Gilbert, Read & Goss, 2012)

Table 7: Overview of the standard recovery programme (Gale, Gilbert, Read & Goss, 2012)

During the recovery programme each session lasted 2.5 hours.

- Session 1-8: (twice per week) followed by a clinical review and questionnaire pack (as per usual CEDS twenty session standard programme).

- Session 9-16: (twice per week). Plus weekly CFT diary for remainder of programme (which gives indications of self-compassion \ self-criticism and eating disordered symptoms that patients are working on in treatment).

- Session 17- 20: weekly group, then clinical review and questionnaire pack post session 20 as per CEDS programme.

- Session 20-35: weekly group.

- Session 36 -40: Weekly group, then a questionnaire pack post session 40.

- Session 41-43: monthly maintenance group. Then clinical review and questionnaire pack.

Table 8 (In section 3.7) shows an outline of the treatment provided during the recovery programme.

Further questionnaire packs were then administered at, 6 months and 12 months.

Patients were then asked to complete one additional clinical interview (approximately 1 hour) and one additional questionnaire pack compared to standard CEDS treatment protocol at the end of the extended research programme.

**3.7 - The Research Programme:**

Stage 1: Initial Assessment:

This followed the Coventry Eating Disorder Service (CEDS) standard assessment protocol and included 3 hours clinical interviews spaced over two assessment appointments, the collection of demographic information (including gender, ethnicity, occupation, weight, height and eating disorder history with any co-morbid psychopathology). Data on duration of illness was also collected. This assessment also included routine clinical questionnaires as outlined in the measures section. This enabled an initial diagnosis to be made and appropriate treatment to be planned. This clinical information, formulation, and treatment plan is routinely discussed with patients at a follow-up interview within two weeks of assessment.

Stage 2: Identification for inclusion into the study:

If patients met inclusion criteria (e.g. Anorexia Nervosa, Bulimia Nervosa, or Eating Disorder Not Otherwise Specified with a Body Mass Index between 14.5 - 17.5 and

treatable as outpatients) they were identified as potential participants. The study was introduced at the post-assessment feedback interview; they were offered treatment as usual (the current 27 session CEDS out-patient programme) or inclusion into the current study.

All participants then experienced a no-treatment baseline phase ranging from 6-10 weeks. In common with other CEDS waiting list patients, they may have been offered medical monitoring and basic advice on meal planning to stabilise weight loss during this period.

Stage 3: Group based Compassion Focused Therapy for Eating at Low Weight (CFT-ELW):

Following the baseline phase the treatment protocol was delivered by the author / principal investigator, and the Consultant Clinical Psychologist / Head of CEDS, and staff from the CEDS team. Participants had a clinical review and questionnaire pack at session 8, and questionnaire pack at session 20 to allow comparison with CEDS existing treatment program, and a clinical review and questionnaire pack at session 40.

Table 8: The CFT-E low weight programme:

| Session | Topic area / aim of the session |
|---|---|
| Session 1-17 | • Sessions 1-17 remained consistent with the standard treatment programme as outlined in Table 6. |
| Session 18 | • Meal Planning<br>• BMI targets and blocks |
| Session 19 | • Food shopping<br>• Cooking for self |
| Session 20 | • Physical blocks<br>• Realities of re-feeding<br>• Presentation on reflux, constipation and other physical health problems associated with re-feeding |
| Session 21 | • Feelings regarding weight gain |

| | |
|---|---|
| | • Revisiting formulation |
| Session 22 | • Urges for increasing activity levels |
| Session 23 | • Meal Planning<br>• BMI Targets and blocks |
| Session 24 | • Managing fear<br>• Graded exposure i.e. feared foods |
| Session 25 | • Managing hunger and urges to overeat |
| Session 26 | • Managing changing size and shape |
| Session 27 | • Managing others comments regarding changes to shape and size<br>• Managing others expectations |
| Session 28 | • Relapse prevention<br>• Reviewing what works |
| Session 29 | • Meal Planning<br>• BMI targets and blocks |
| Session 30 | • Building a life without an eating disorder<br>• Who am I?<br>• Who do I want to be? |
| Session 31 | • Letting the eating disorder go and associated emotions i.e. grief |
| Session 32 | • Making sense of emotions<br>• Hormonal changes and urges<br>• CFT Multi-mind |
| Session 33 | • Continuation of managing emotions |
| Session 34 | • Eating more spontaneously<br>• Managing social eating |
| Session 35 | • Meal planning<br>• Managing difficult times i.e. Christmas |
| Session 36 | • Managing difficult times continued |
| Session 37 | • Revisiting formulation<br>• Issues left to work on from the past |

| | |
|---|---|
| | • Body Image |
| Session 38 | • Body Image<br>• Body Acceptance |
| Session 39 | • Being healthy and staying healthy |
| Session 40 | • Life without weekly group |

Stage 4: Treatment follow-up:

All participants had access to the CEDS monthly maintenance program. They had an individual clinical review and repeat of clinical questionnaires at end of treatment, and at 3 months, 6 months and 12 months following treatment. Table 9 shows the content of the follow up (maintenance) phase of treatment.

Table 9: The maintenance programme

| Session | Topic area / aim of the session |
|---|---|
| Follow Up 1 | • Coming off meal plan<br>• Intuitive eating |
| Follow Up 2 | • Trouble shooting |
| Follow Up 3 | • Progress review<br>• Goodbye |

During this stage all participants were approached to take part in a clinical interview, which was a semi-structured interview with the focus on patient experience / journey in the research programme.

**3.8 – Ethical Issues**

Ethical approval:

No direct work was carried out until ethical approval from the NHS ethics committee had been confirmed. The NHS IRAS procedure was completed as per research protocol and favourable opinion was gained from Staffordshire Research Ethics Commitee (REC), following review and an ethics panel which was attended by the Principal Investigator (author) and the treatment service manager. Coventry University ethics approval was also obtained due to the research study and its data

being used for this dissertation. It was made clear through the ethics process that although the study was planned to include and analyse three group cohorts, only the data from the first group would be used and analysed for this dissertation.

Informed Consent**:**

1) Potential participants were provided with a patient information sheet (see appendix 5) outlining the purpose and procedure for the study and differences to standard treatment at CEDS.

2) They were informed that their participation or refusal to take part will not have any influence over their right to treatment or the quality of the treatment they receive.

3) They were given time between being provided with the information sheet and their follow up interview to consider whether they wished to be involved in the study.

4) Opportunities for questions and further discussion were made available to address any matters arising from the information sheet prior to consenting to participation in the study at the follow-up interview. Potential participants were also be given the contact details of the lead researcher / principal investigator to enable them to ask any further questions that they had.

5) Potential participants were not approached without the consent of Coventry Eating Disorder Service.

Potential for distress:

Participants were likely to be attending treatment as a consequence of the distress caused by their eating disorder. The research programme was specifically designed to address this and would be delivered by clinicians with significant expertise and experience in the area of eating disorders and in a highly specialist eating disorder service, with access to psychological and medical support and supervision. Participants were required to complete one additional clinical interview and questionnaire battery over and beyond that expected during treatment as usual.

Therefore it was not expected that this will significantly increase the potential for distress due to this additional requirement.

The additional treatment sessions to the program were requested by previous low weight patients and therefore it was anticipated that the distress they may have experienced in the shorter version of the program (treatment as usual) may be mitigated by the new treatment protocol.

If distress was generated as a consequence of their participation in the study, this would be addressed at CEDS via the provision of additional medical or psychological support if required. Mechanisms were in place to manage this for the current CEDS treatment programs (including additional post-group time with therapists', telephone support, or additional medical reviews).

Confidentiality:

1) Participants were given assurance that they will remain anonymous in all publications of the research.

2) Data on any individual would not be shared with anyone who is not directly involved with the study without prior consent from the participant.

3) Clinical information would be respected and shared following the Trust guidelines for clinical confidentiality and the management of clinical risk. This was routinely explained to patients at their initial assessment.

Data protection:

1) The raw data, which is in paper format, was to be stored in the participant's file (notes). This was then kept in a locked filing cabinet at the treatment service.

2) The inputted data was stored on an encrypted memory stick that was kept at the treatment service. The data on the memory stick did not have any identifiable information on it.

3) Each participant was given a code to ensure anonymity and those were kept in a file containing the identity of the participant and their corresponding code. This was

needed to enable individual feedback if required. The file with this information was kept at the treatment service.

4) The confidentiality and data protection information was explained to prospective participants in the patient information sheet (see Appendix 4).

5) Participants were to remain anonymous in any dissemination of the research. This was also explained in the patient information sheet (see Appendix 4).

Withdrawal:

It was made very clear to all participants that they were free to withdraw from the study at any time. They were also offered an individual review to discuss alternative treatment options if required.

Medical Risk:

Due to the fact that participants were of low weight (Body Mass Index 14.5 - 17.5) they needed to be regularly medically monitored by both CEDS and GP. Should any of the Participants become physically unwell during the study, immediate action would be taken and inpatient admission considered. This patient group are more vulnerable due to the associated psychological and medical risks they pose by nature of their illness and as a result they were closely monitored throughout the treatment programme as previously stated.

**3.9 – Role Awareness:**

The principal investigator for the study and author of this dissertation also facilitated (as therapist) the first patient group for which the data were collected. There was an awareness of potential limitations this may cause. Measures were taken to ensure that limitations were minimised, this was particularly true regarding the clinical interview at the end of the study. To minimise potential bias another clinician completed the interview with the data being transcribed and analysed by the author.

It was also very important that participants were aware of the roles people were taking be that nurse, therapist or researcher. This was to ensure full transparency

and to avoid confusion: '…….nurses must always make it clear to participants that they are undertaking a research project and that they are acting as a researcher rather than a nurse' (Moule and Goodman, 2009 p. 68)

**3.10 – Treatment setting:**

Treatment was conducted in an NHS outpatient clinic, specialising in the assessment and treatment of adults aged 18-65 years with an eating disorder. The group therapy for this study was administered by the manager of the treatment service (Consultant Clinical Psychologist and the principal investigator. A trainee Psychologist also attended the sessions to observe and cover the sessions in line with local protocol.

**3.11 – Sample:**

Following discussion with a statistician sample size calculations were performed a priori for the two main aims and principal outcome variables. With regard to the first of the main aims of the study, it was calculated that a sample size of 25 patients in total was required to provide 80% power at two-sided $p<0.05$ assuming a large effect size (or 27 per group if data distribution requires the use of non-parametric analysis and tests). For the second main aim, testing for significant changes at 6 month follow up would require 15 patients to be assessed at both treatment completion and at follow-up (80% power at two-sided $p<0.05$ assuming a large effect size) or 34 patients (assuming medium effect size). Due to the small sample size achieved the alpha value was adjusted to allow for this with Stevens (1996) identifying a value of $p<.15$ as a level appropriate within small scale research.

The research study in its entirety will span three years and it was therefore expected that up to 40 patients will be recruited to the study. Previous experience using the CFT approach indicates a relatively low dropout rate (less than 10%). Therefore the best estimate of the numbers of patients completing all stages of treatment/follow-up would be around 36. Therefore, the expected sample size would be adequate to assess the main aims of the study.

For the purpose of this dissertation only the data from the first patient group has been analysed providing adequate data for a pilot / feasibility study.

**3.12 – Analysis:**

Three types of data were collected for this study:

**1)** Demographic data: This included age, gender, and ethnicity data. Clinical diagnosis was also made at initial assessment, no-treatment baseline, at clinical review, session 8, session 20, session 40, three month follow up and six month follow up. Body Mass Index (BMI) was recorded at initial assessment and at, no treatment baseline, after session 8, weekly thereafter until session 40, and then at three and six month review.

Additional monitoring of weight and physical symptoms were also required and were dependant on clinical need. This was to ensure the physical safety of the participants and is not reported as part of the study.

To compare differences in demographic data between those CFT-E for low weight (47 sessions) and standard 27 session CFT-E, descriptive statistics are used. Percentages of patients no longer meeting diagnostic criteria were reported. Low weight patients completing the 27 session programme was matched with patients completing the 47 session programme to allow for statistical comparison. Matching was based on similar variables within the sample, including; gender, BMI, completion of treatment and diagnosis. All patient data being used from standard treatment had a diagnosis of Anorexia Nervosa or EDNOS (Anorexic Type), all self report measures were completed throughout treatment and in follow up, and only patient data post 2010 was considered as this was the point that Compassion Focused Therapy (CFT) was fully embedded into the treatment programme at Coventry Eating Disorder Service.

**2)** Self-report scales / measures: these address eating disordered symptomatology, including eating disordered behaviour and beliefs; general psychosocial functioning; and the key variables that CFT-E targets; shame, self-criticism and self-compassion. Comparisons were made at initial assessment, no treatment baseline, at clinical review, session 8, session 20, session 40, three month and six month follow-up.

To evaluate the overall outcome of CFT-E 47 session programme, a within subjects t-test will be used (or non-parametric equivalent dependant on data distribution). Repeated measures analysis of variance was used to assess significant changes between each of the interim assessment points.

To compare the effectiveness of CFT-E 47 and 27 session programmes, a between group t-test (or non-parametric equivalent dependent on data distribution) will be used at the end of 20 sessions, and the follow up points.

**3)** Self-report diaries: These were due to commence once patients began the treatment phase of the program. Diaries included information on a participant's eating pattern, food consumption, energy expenditure, use of key therapeutic techniques as homework, and self-criticism / self-compassion. These are currently used routinely in clinical practice and reviewed as part of the CFT 27 session treatment program to assist in goal setting and evaluating treatment effectiveness / compliance. This qualitative data was due to be summarised using content analysis and frequency. However, this was not possible as the participants did not complete their diaries and the decision to withdraw the data was made.

Participants were then invited to take part in a structured clinical interview at the end of the treatment programme. These focused on the patient experience of the group programme and the use of CFT.

**3.13 – Dissemination Plans:**

- This study will be written up and published in an appropriate peer reviewed journal.
- A summary of the results will be written and sent to the participants if requested.
- The study will be presented at future conferences such as the Eating Disorder International Conference and the Comprehensive Local Research Network – West Midlands South Conference.
- The approach and materials will be manualised.

### 3.14 – Costs:

The study was funded by the Comprehensive Local Research Network (CLRN) – West Midlands South. This funding covered study costs, supervision and training of Hannah Andrews (Clinical Nurse Specialist / Principal Investigator).

### 3.15 – Gantt Chart:

See Appendix 7 for a Gantt chart depicting the time frame for the study.

# CHAPTER 4

## 4. IN TREATMENT

### 4.1 – The Treatment:

A brief overview of the group therapy treatment programme is provided to give a sense of what the treatment involved from the perspective of the therapist, researcher and the participants. The following discussion will include a number of reflections from the therapists' and researchers point of view.

### 4.2 – Group Therapy:

Group therapy or group based treatment is a way of delivering therapy to a number of people simultaneously and a way of ensuring illness is no longer hidden. It is an opportunity for individuals to share their experiences and to use these experiences to help one another. The benefits of group therapy are the universality or commonality and altruistic nature of the therapy. It is cost effective which is important, particularly in the current NHS climate which has a number of funding concerns. The ability for therapeutic alliance is often enhanced along with social isolation being addressed. Being with others with similar problems also enhances motivation and encourages interpersonal learning. These processes can provide an instillation of hope, catharsis and often structure which individual therapy often cannot tackle.

Some of the limitations that need to be acknowledged when running a group as a therapist can include the patient's fear, anxiety and stigma. The perception of the patient that one to one therapy is better can often be a problem, with patients perceiving that they are receiving a reduced service. The challenges of having a mixed age range and group size can also bring about difficulties, and this is just one of the many factors therapists need to be aware of. Dependency can occur amongst group members, which is often counteracted by having stringent group rules which are developed collaboratively between the patients and the therapists / facilitators. The group rules developed by the therapists and the participants for this study can be seen in Table 10:

Table 10: Group Rules.

| **Group Safety** |
|---|
| The group is unable to work with people who are a danger to themselves or other people. |
| If a group member is a risk to themselves, either because of deliberate self-harm or dangerously low weight, they will be found alternative means of support. |
| Group members agree not to discuss ways of making their or other peoples eating disorder worse (e.g. finding faster ways to vomit). |
| Group members will not eat during sessions. |
| Group members will not vomit in or near the building. |
| Group leaders and the clinical and supervisory team will maintain the confidentiality of the group at all times, unless a person is a danger to themselves or others. |
| Group members can discuss themes arising in the group but will not disclose personally identifiable information to others. |
| Group members and group leaders can choose to acknowledge each other outside of the group but will not tell others where they met. |
| Group members will not see each other outside of the group until the group has finished. |
| **Participating in the group** |
| People are expected to fully participate in the group. |
| Group members will aim to attend every session. |
| If they are unable to attend, they will let the group leaders know before the session. |
| If participants miss more than 2 sessions without contacting the group leaders, we will presume they have left the group. |
| Group members will not attend under the influence of drugs or alcohol. |
| Group members will talk and listen respectfully to other group members. |
| The group aims to work at a pace people can manage but there is a time limit to the group. Therefore, therapists may occasionally need to ration the time people have to speak or encourage people to use time in the group. |
| Group members will attempt in-session and homework tasks, and let the group leaders know if they are unable to do them. |
| If a person finds things too overwhelming during a session they can request a time out with one of the group leaders but will then return to the group before the end of the session (to let them know they are ok or are going elsewhere to get support); the rest of the group will remain in the room and continue to work on that sessions topic. |
| It is ok to contact the group leaders once per week for clarification or help with programme tasks. Group members are encouraged to contact group leaders if they are having difficulties with out of session tasks or their symptoms are getting worse. Contacts will be recorded and information passed on to the other group leaders to avoid confusion or mis-communication. |
| If there is a medical or psychiatric emergency; group members should contact their GP or go to the Accident and Emergency Department at University Hospitals Coventry and Warwickshire (UHCW).<br>*Examples of a medical emergency include:*<br>*-Fainting / passing out* |

*-Heart palpitations / Chest pain*
*-Blood in vomit or stools*
*-Fluid retention*

*Examples of a psychiatric emergency include:*
*-Feeling suicidal and wanting to act on these feelings*
*-Deliberate self harm*

If symptoms are deteriorating during the week please let the group leaders know.

During the group, we will identify what constitutes an emergency for you, and when you should contact the group. If you are not sure always contact your GP and let CEDS know.

The therapists running the group needed to be aware of the risks of possible transference and counter-transference which can increase 'burnout' in the therapists and disrupt the dynamics within the group (Delucia-Waack, 1999). Within the eating disorder population, competition between group members can occur, for example competing for the most weight loss. The monitoring of symptoms and risk factors can be more challenging although is often tackled through having three group facilitators. Group therapy can also place an increased amount of pressure on the therapist / facilitator.

**4.3 – The Clinical Nurse Specialist / Research Nurse:**

In Chapter 3, section 3.9, the importance of role awareness was discussed as the author had a dual role of Clinician (Clinical Nurse Specialist) and Research Nurse. This was a difficult role which raised several challenges:

i. The possibility of introducing bias to the data collection as participants over time had built a therapeutic relationship with the therapists and may have been eager to please when completing self report measures.

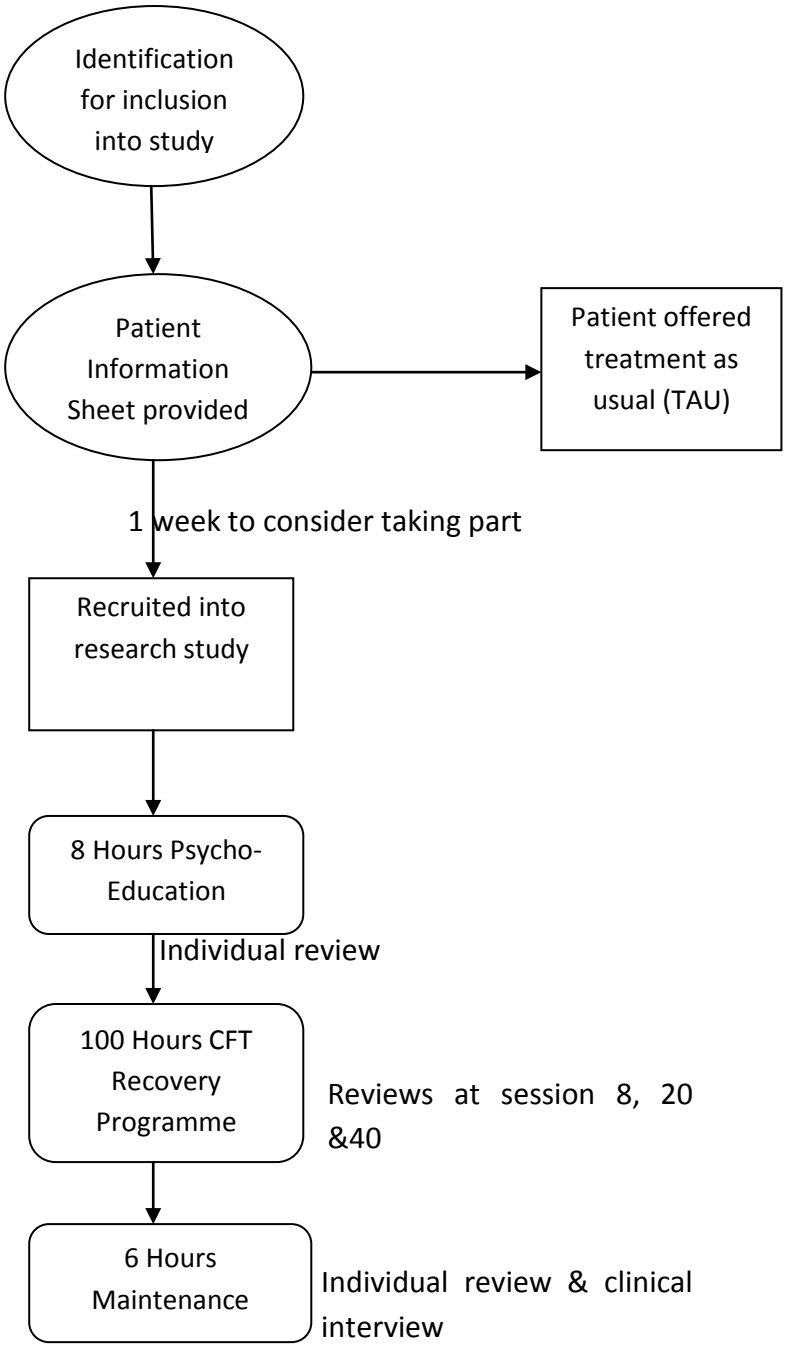
ii. Therapist 'burnout'.

iii. Role separation.

Each of the challenges was acknowledged during inception of the study, throughout and in the process of write-up when acknowledging limitations (see chapter 6). With the first challenge identified (i) the possibility of bias due to the dual role of the Principal Investigator, this was taken into account during study inception and in the design of the study itself. It was attempted to separate the roles with the author of this dissertation having a purely research role and allowing other clinicians to provide the therapy within the group. However, this was not possible within the demands of the service and due to being short staffed within the clinical area. Several discussions were held with the clinical team in an attempt to make alternative arrangements; however, it was acknowledged that if the study were to run, a dual role must be taken. With regard to the quantitative arm of the study it was identified that as the data collected was from self report measures, there would be limited influence from the clinician's / researcher in the participants' answers. For the qualitative arm of the research it was decided that an independent individual would carry out the interview, whilst the researcher analysed the qualitative data.

With the second challenge (ii), therapist 'burnout' was a risk due to the length of the treatment programme. The research study ran for two years with one year of that being the therapy itself. A total of 114 hours were spent providing CFT to the participants, with a further 4 hours for individual reviews. Figure 3 shows a flowchart of the CFT therapy programme:

Figure 3: Flowchart showing the therapy / research programme:



Being a therapist alone can be draining. Existing research examining how treatment providers are personally affected by working with patients with eating disorders suggests that they may be particularly prone to burnout (Hamburg & Herzog, 1990; Jarman, Smith, & Walsh, 1997; Kaplan & Garfinkel, 1999). Burket and Schramm (1995) identify that treatment providers frequently report emotional reactions to patients, whilst Olivardia and Schoen (2009) propose that clinicians experience changes in their own relationships with food, eating and appearance. These factors are important to consider as a study completed by Warren et al (2012) focusing on burnout concluded that 'the burned out therapist was rated as significantly less likable, empathic, and attentive than the therapist who displayed no symptoms of burnout. To ensure the risk of 'burnout' was minimised for the duration of this study a number of measures were taken; supervision was provided and clinical interventions completed to assist with building empathy, maintaining boundaries, depersonalizing patient behaviour, and decreasing over-responsibility for patient progress.

With regard to the final challenge of role separation (iii), the responsibility was placed on the author as the only individual with the role of both therapist and researcher. Participants knew from commencement of the research study that this dual role was required throughout, with participants accepting this without issue. No concerns were raised throughout the research programme and therapeutic alliance did not appear affected. It would be difficult to test for the impact of this dual role without perhaps completing a small scale qualitative investigation with the existing group focusing on this theme.

Another issue arising during the research programme was consistency of facilitators. The third facilitator was a Trainee Clinical Psychologist; therefore the role was transient and proved a challenge as another Trainee Clinical Psychologist took over from session 30. The other two facilitators remained constant throughout apart from each taking two sessions away due to holidays.

# CHAPTER 5

# 5. QUALITATIVE RESULTS

## 5.1 - Overview

From the start of the study there felt a sense of 'last resort' with participants openly verbalising their awareness that 'this may be a last resort before being admitted to hospital as an inpatient'. Participants were keen to be involved despite the commitment involved, in fact by session 40 only 2 (out of 6) wanted treatment to end.

At the end of session 40, a structured interview took place to provide qualitative data to help validate quantitative findings and to allow the participant voice to be heard and the overall patient journey to be explored. The interviews were completed by a voluntary assistant psychologist within the service to try and limit bias, as has been previously highlighted. The interview schedule was developed in such a way as to focus on specific elements of the programme (see Appendix 8 for qualitative interview schedule). Due to the restrictions of this dissertation Interpretative Phenomenological Analysis (IPA) was not possible, although may be completed at a later stage to allow for possible journal publication. Originally the plan had been to complete a semi-structured interview to allow for more freedom for the participants in their answers. However, it was felt that a structured interview would provide enough data / material for publication and for the purpose of this dissertation.

## 5.2 - Findings

For the purpose of this dissertation general themes are briefly explored using a narrative format and direct quotations from the participants themselves to help reflect some of their personal experiences of taking part within the study.

*Was the treatment acceptable / unacceptable?*

All of the participants identified that it was good to have been offered an extended treatment programme, finding treatment acceptable with no unacceptable

components. Participant 1 identified “I wouldn’t have been ready after 20 sessions”, referring to the standard treatment which had been offered to her. Themes arising which led to treatment acceptability were; quality of therapists and skills shown; Intensity of initial sessions being twice per week useful and supportive; engagement from other group members and care and attention from other participants and facilitators.

*What was most helpful / unhelpful?*

The most helpful element described by all participants were; being in a group “we were going through it together”; commonality “helpful that everyone had similar issues” with “common behaviours helped me feel better about it”; the environment felt safe and promoted a open, honest and direct setting with no friction; facilitators were very helpful “facilitators relationship had a great impact on the way the group worked, felt almost like a family unit towards the end”.

Unhelpful elements were fewer and consisted of; loss of focus at times “when given time alone” (on activities); and towards the end of the programme participants were in different places (psychologically) “this was hard”.

*Preferred to have done /not done?*

One of the participants stated that they would have preferred to have had more individual therapy during the group programme. Participants were able to identify several areas that they would preferred to have not done during treatment, however were able to acknowledge that they were helpful. These non preferred areas were: to not have been weighed as frequently, ground rule regarding not contacting each other outside of group until treatment completion, with facilitators being aware that this rule was breached by two participants “two members were texting each other and using facebook”, “this impacted on trust”.

*Most / least difficult aspects of treatment?*

Formulation was identified by all participants as being the most difficult aspect of treatment, although helpful participants acknowledged it left them feeling

vulnerable. Least difficult consisted of the coping skills learnt such as distraction techniques and distress management. The response to compassionate imagery was mixed, with two of the participants seeing it as most difficult and the other three as least difficult. They all recognised it as helpful.

*Overall experience of the group?*

Overall the experience of the group was positive, with the following comments made; “very glad I did the group and met people that I did”; “overwhelmingly positive”; “best service received from NHS”; “No cliques, no falsities, a positive environment”; “everyone had similar issues which made me feel better”; “seeing how the others progressed encouraged me to progress more”; “it was fun at times and relaxed which was good”; and “felt everybody was committed”.

The negative experiences were noted as; “to start with I felt competitive, comparing myself to the others”; “knowing who gained and lost weight was sometimes difficult”; “initial stages I was comparing my weight to others”. The comments lend themselves to a theme of worries about weight, being judged during the early stage of therapy and comparisons. Two of the participants also stated that the questionnaires were difficult but necessary.

*Did treatment help?*

Participants found the treatment helpful, stating; “I wouldn’t have been able to do it alone”; “It helped me to eat again”; “made me kinder to my needs”; “didn’t just help with food, but also helped with impulsive behaviours”; “it helped me to understand why I behave the way I do and to understand basic rules of nutrition”; “it helped me to gain weight and to want to make progress”; “had sense of belonging”; “made me realise I needed to get better”; “helped me to accept that I needed to change”.

*Did it make it worse?*

Participants were able to acknowledge that during the very early stages of treatment, their symptoms worsened; “At first I didn’t want to be the first to gain weight”; “Initially gained more behaviours, I became obsessive when writing the

food diary"; "When addressing formulation I felt emotionally vulnerable". Two of the participants felt that it hadn't worsened any aspect of their eating disorder.

*Which elements are still used? (Meal planning, Distress management, Soothing Rhythm Breathing, Safe place, compassionate image, compassionate letter writing, compassionate behaviours)*

All participants identified that they continue to use the elements as outlined above in maintaining their progress in recovery from their eating disorder, favouring distress management, soothing rhythm breathing and compassionate behaviours.

*Shame*

Participants stated; "I no longer feel ashamed about eating disorder symptoms"; "much better, destigmatised the process"; "yes it helped, but I still struggle with body image and embarrassment".

*Self-Compassion VS Self-Criticism*

The following answers were given; "not as critical now, more self-compassionate"; "self-compassionate voice is starting to come out"; "depends on the day, I can still be critical but I don't believe it as much now"; "I have become nicer to myself on the whole but it's difficult".

*Safety Behaviours*

Participants verbally stated a significant reduction in safety behaviours, identifying; "I no longer use eating disorder behaviours or am ritualistic"; "they still kick in occasionally but have reduced"; "stopped restriction due to my hunger being back online"; "restriction is better".

*Social Functioning*

Participants provided some powerful answers to these question, highlighting the impact on quality of life; "I've got my life back"; I've got a good social life now"; "much improved"; "definitely helped"; "added quality to social interactions, allowed me to appreciate it more"; "much more open minded now".

*Formulation*

The process of formulation is key to help patient's understand their story and how their eating disorder developed and why it's being maintained. It is often a challenging process as patients are required to think about their past which can often bring painful or difficult memories to the surface. Participants were asked whether formulation was useful; "helped me to understand why I was doing it"; "formulation was useful, being asked the question of where it came from"; "historical influences were most useful"; "too difficult".

*Three systems model*

The model which was described in Chapter 1 underpins CFT and helps the participants to understand their emotional regulation systems; "helped me to understand I was in the drive system a lot"; "Learning about switching between different systems was useful, a realised I didn't use soothing"; "realised where I'd been trapped and which areas weren't coming online"; "very useful"; "useful, nice to normalise things"; "was good to learn, soothing system most useful".

*What kept you coming?*

The research programme asked for a commitment from the participants due to the length and intensity of treatment, it is therefore essential to ascertain what kept the participants coming; "I wanted to", "I needed to do something to be able to go back to university"; "I liked the people, participants and clinicians"; Wanting to get better and reach the end of the programme"; "I wanted to get better"; "Being with the other girls"; "felt like a safe place"; "gained sense of self", "others cared"; "others in the same boat"; "formed bonds within the group"; "very committed from the start"; "felt respectful of my place within the group"; "always felt the group was beneficial, at all points"; "wanted to get well".

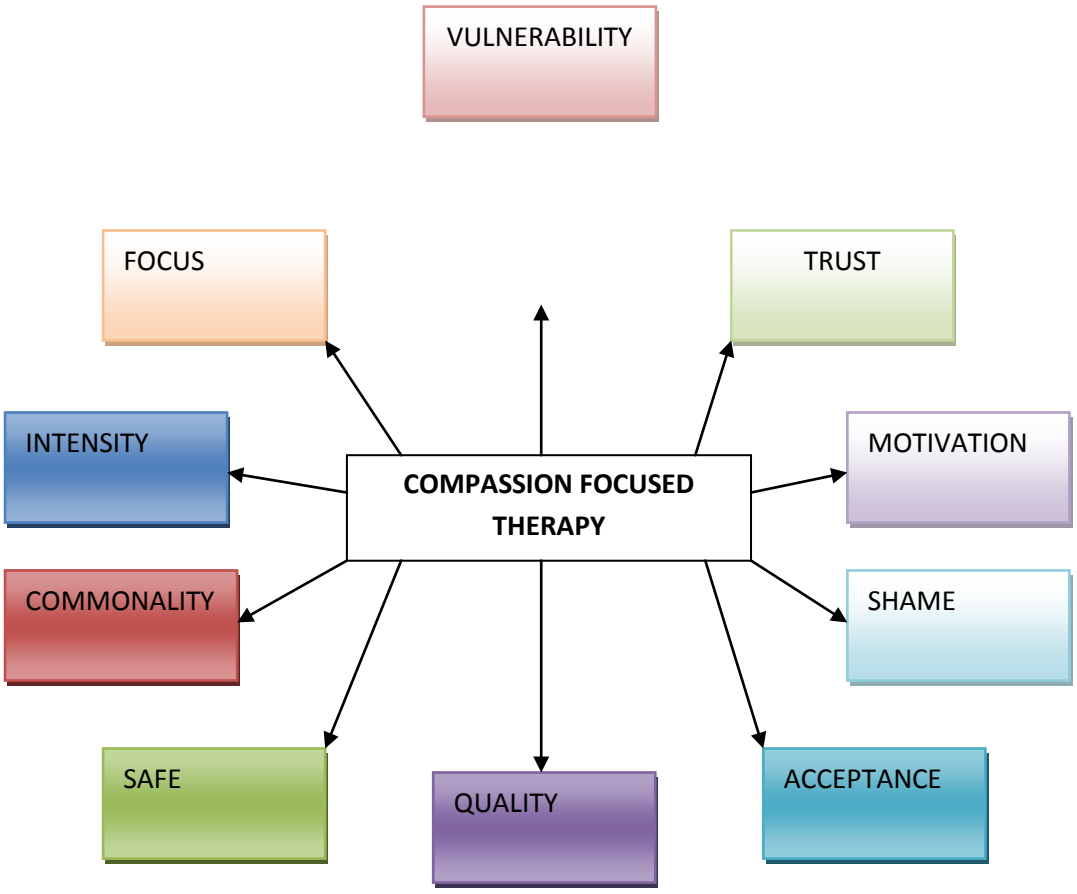
*What would you add / change?*

Due to this being the first treatment of its kind in the community for the low weight population, it was felt necessary to ask the participants for feedback; "nearer the

end tailor the programme to more individual needs"; "let the group have space to change the programme"; "allow people to contact each other outside of the group"; "shorter session time"; "more focus on body image earlier"; "less handouts"; "less theory at first"; "more sessions".

**5.3 – Identified Themes:**

The data has been explored and common themes have been extrapolated. Braun and Clarke (2006) identify 'a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set'. (p.79). The focus within this research is the quantitative data, however the small amount of qualitative data collected goes someway to add validity to the quantitative findings. Whilst full thematic analysis could be undertaken within the realms of this dissertation, some of the key themes have been identified. The following diagram depicts the main themes:



Ten key themes were identified, being drawn out from the collated data. The themes represent positions, feelings and overarching ideas which arose during the time in group therapy and being in receipt of compassion focused therapy. A brief description of each theme follows:

Vulnerability:

Patients described a feeling of competitiveness during the initial phase of treatment, stating 'I felt competitive, and compared myself to others', with this centering around weight, shape and appearance. Patients also felt at times like they were being judged, which caused them to feel 'emotionally vulnerable'.

Trust & Safe:

A sense of 'safeness' was stated with patients identifying the group as having a 'family' feel, with a sense of normality. Patients stated the group and environment felt like a 'safe place' and all patients acknowledged they felt respectful of their place within the group. There was trust between the clinicians and patients allowing the safeness to be paramount.

Motivation & Acceptance:

Motivation is key in recovering from an eating disorder as the treatment took commitment from the patients and this was reflected in the qualitative information, with patients repeatedly stating 'I wanted to get better', and 'I wanted to get well'. This level of motivation was linked to a feeling of acceptance with patients identifying 'it helped me to accept that I needed to change'.

Shame:

Patients felt a great sense of shame during the early part of their treatment, stating 'I felt embarrassed' however once the theory of compassion focused therapy was instilled the patients began to understand that their difficulties weren't their fault, which led to 'no longer feeling ashamed'.

Quality:

Patients referred to the quality of care that they felt they were receiving, commenting on the skills of the clinicians and the fact that they felt cared for and nurtured.

Commonality:

The group process was beneficial due to patients feeling like they were with others who understood, stating a 'sense of belonging', feeling 'others cared'. Patients identified 'seeing how others progressed, encouraged me to progress more'.

Intensity & Focus:

The programme was intensive and long in duration, patients understood this when they entered into treatment, however the realities of this were commented on with patients stating treatment felt intense and that there needed to be a great deal of focus throughout.

**5.4 – Summary:**

The aim of this chapter was to provide an insight into the treatment process, the demands placed on the clinicians and participants and to allow the participant voice to come through. The treatment was long and at times challenging with the research element conjuring further demands around structure, ensuring data collection and minimising bias. The six participants consented to take part in this study for a variety of reasons personal to them but with an overarching theme and need to get better and to improve their quality of life. There were positive and negative themes and ideas raised with participants being honest about their experiences and seemingly feeling able to talk about the downsides. The absence of the term 'research' being heard during clinical interview was interesting and will be explored further in Chapter 7.

# CHAPTER 6

# 6. QUANTITATIVE DATA ANALYSIS

## 6.1 - Organisation of data analysis

Data were analysed using SPSS 17 in the following order:

1. Initial screening and cleaning of the data were completed, identifying missing data and screening for unacceptable variable values, Skewness and Kurtosis.
2. Presentation of descriptive statistics, including age, diagnosis and means and standard deviations for each of the self report measure subscales used.
3. Presentation of descriptive statistics for Body Mass Index.
4. Reliability testing analysis: Internal reliability (using a Cronbach alpha test) and data distribution (using a one-sample Kolmogorav-Smirnov goodness-of-fit test) for the subscales of each of the report measures used.
5. Mean values were further explored and three key time points (assessment, session 20 and session 40) were identified for further analysis.
6. Data Analysis was separated into two sections focusing on the two original research questions posed for this study.
7. Parametric tests were applied, namely ANOVA one way analysis of variance and t-tests to identify any statistical significance in the findings. Each of these tests was applied to Body Mass Index and each of the self report measures and associated subscales.

## 6.2– Data Screening

Data were initially screened using SPSS 17 frequencies. This identified missing variables, unacceptable variable values, range scores, means and standard deviations. One case has been removed from analysis due to large amounts of incomplete data. Where there were isolated missing values, mean values have been applied. Normality of distribution was assessed by using measures of skewness, kurtosis and boxplots. Data were normally distributed and assumptions met therefore parametric tests were applied. Data analysis were completed using 5

participant data sets as one participant despite attempts made by the research team failed to complete self report measures at session 20 (time point 5) and session 40 (time point 6). These time points were key stages in terms of analysis and therefore the data from this patient was excluded from all further analysis.

### 6.3 - Descriptive statistics

The study included 6 female participants. Their mean age was 26.3 years, with a standard deviation of 7.12. They ranged between 19 years and 38 years old at initial assessment. 2 participants were diagnosed with Anorexia Nervosa (33.3% of the sample); and 4 participants were diagnosed with EDNOS (66.7% of the sample).

Each of the questionnaires has separate subscales as previously listed in the measures section of the article. This means that prior to data analysis being completed the data required transformations to be completed, by computing new variables for each total score for each subscale. These computes can be seen in Appendix 9. Mean scores were initially collated across all measures and with BMI scores. Three key time points for analysis were then identified at a) time point 1 (assessment), which provided baseline scores on all measures, b) time point 5 (session 20), which allows for comparison against standard treatment and c) time point 6 (session 40), which is end of intensive treatment phase.

Table 11: Mean scores for all self report measures

| Scale | Subscale | Mean Score Time 1 | Mean Score Time 2 | Mean Score Time 3 |
|---|---|---|---|---|
| EDE-Q | -Restraint | 4.48 (SD=.94) | 3.32 (SD=1.38) | 2.32 (SD=1.21) |
| | -Eating Concern | 4.28 (SD=.74) | 3.52 (SD=1.38) | 2.24 (SD=1.68 |
| | -Shape Concern | 4.80 (SD=.81) | 4.47 (SD=1.30) | 3.55 (SD=1.58) |
| | -Weight Concern | 4.12 (SD=1.22) | 3.48 (SD=1.52) | 3.12 (SD=1.55) |
| SEDS | -Assertiveness | 26.80 (SD=4.79) | 25.42 (SD=4.58) | 20.54 (SD=7.43) |
| | -Self Esteem | 26.82 (SD=11.98) | 26.76 (SD=6.64) | 23.08 (SD=13.19) |
| | -Self Directed Hostility | 26.06 (SD=9.97) | 24.74 (SD=10.99) | 18.82 (SD=7.94) |
| | -Self Perceived External Control | 25.32 (SD=9.68) | 24.44 (SD=10.22) | 14.84 (SD=14.39) |
| | -Anorexic Dietary Cognitions | 29.76 (SD=7.07) | 32.34 (SD=5.99) | 23.68 (SD=10.29) |
| | -Anorexic Dietary Behaviours | 23.82 (SD=7.07) | 18.12 (SD=7.65) | 9.48 (SD=6.76) |
| | -Bulimic Dietary Cognitions | 31.08 (SD=11.15) | 30.76 (SD=11.19) | 31.12 (SD=11.44) |
| | -Bulimic Dietary Behaviours | 16.44 (SD=15.22) | 22.32 (SD=16.54) | 14.82 (SD=9.50) |
| OAS | Total | 36.40 (SD=8.53) | 43.60 (SD=13.50) | 37.40 (SD=16.05) |
| ISS | -Self Esteem | 7.60 (SD=4.98) | 8.60 (SD=5.68) | 9.80 (SD=6.09) |
| | -Shame | 62.00 (SD=13.53) | 70.20 (SD=20.30) | 60.80 (SD=29.01) |
| CORE | -Wellbeing | 2.45 (SD=.99) | 1.90 (SD= 1.18) | 1.80 (SD=.85) |

| | | | | |
|---|---|---|---|---|
| | -Problems<br>-Functioning<br>-Risk<br>-Total | 2.55 (SD=.76)<br>2.11 (SD=.81)<br>.46 (SD=.87)<br>2.01 (SD=.79) | 2.28 (SD= 1.02)<br>1.56 (SD=.75)<br>.36 (SD=.73)<br>1.64 (SD=.86) | 1.80 (SD=.79)<br>1.23 (SD=.69)<br>.23 (SD=.52)<br>1.32 (SD=.66) |
| FSCSC | -Self Correction<br>-Self Persecution | 29.00 (SD=8.45)<br>12.80 (SD=10.75) | 38.60 (SD=10.08)<br>19.80 (SD=5.44) | 34.40 (SD=15.72)<br>13.60 (SD=9.55) |
| FSCRS | -Inadequate Self<br>-Reassure Self<br>-Hated Self | 25.60 (SD=5.41)<br>11.00 (SD=9.43)<br>10.40 (SD=5.72) | 30.20 (SD=5.40)<br>10.60 (SD=9.26)<br>13.00 (SD=4.58) | 26.60 (SD=7.19)<br>13.40 (SD=6.87)<br>10.40 (SD=5.59) |
| SCS | -Total Compassion | 51.00 (SD=18.12) | 53.60 (SD=17.91) | 58.40 (SD=13.75) |

## 6.4 – Reliability Data

Table 12 reports internal reliability data derived from participants' scores in the current study. Overall internal reliability of all measures was found to be acceptable and consistent with scores found in previous scale standardization studies. However, the scores of the Eating Concern, Assertiveness, Self-Perceived External Control, Anorexic Dietary Behaviours, Inadequate-Self, Hated-Self subscales and Total Compassion were below the usual cut off of 0.7 (Pallant, 2010). Pallant (2010) identifies values above .7 are considered acceptable; however, values above .8 are preferable. Internal reliability of the scales used in this study was considered to be acceptable.

Table 12: Internal reliability: Cronbach Alpha Coefficients

| Scale | Subscale | Alpha |
|---|---|---|
| EDE-Q | -Restraint<br>-Eating Concern<br>-Shape Concern<br>-Weight Concern | .916<br>.501<br>.796<br>.767 |
| SEDS | -Assertiveness<br>-Self Esteem<br>-Self Directed Hostility<br>-Self Perceived External Control<br>-Anorexic Dietary Cognitions<br>-Anorexic Dietary Behaviours<br>-Bulimic Dietary Cognitions<br>-Bulimic Dietary Behaviours | .077<br>.929<br>.800<br>.517<br>.786<br>.507<br>.858<br>.816 |
| OAS | Total | .846 |
| ISS | -Self Esteem<br>-Shame | .932<br>.882 |
| CORE | -Wellbeing<br>-Problems<br>-Functioning<br>-Risk | .804<br>.923<br>.862<br>.826 |
| FSCSC | -Self Correction<br>-Self Persecution | .724<br>.913 |
| FSCRS | -Inadequate Self<br>-Reassure Self<br>-Hated Self | .566<br>.916<br>.691 |
| SCS | -Total Compassion | .517 |

## 6.5 - Data Distribution

Data distributions were explored for goodness-of-fit prior to the final inclusion of scales for data analysis. These results are shown in table 13. Pallant (2010) identifies a non-significant result (Sig. Value of more than .05) indicates normality. All Scale variables showed normality of distribution, except for the SEDS self esteem subscale (.000), the CORE risk subscale (.008) and the FSCRS inadequate self subscale (.014). This was not thought to pose a significant statistical difficulty as the sample population was believed to be heterogeneous on these variables and this was taken into account when choosing appropriate parametric tests to analyse the data. No further data transformation was completed.

Table 13: Tests of normality

| Scale | Subscale | Mean | Std. Deviation | Kolmogorov-Smirnov Z | Asymp. Sig. (2-tailed) |
|---|---|---|---|---|---|
| EDE-Q | -Restraint | 3.7333 | 2.01461 | .229 | .200 |
| | -Eating Concern | 3.9667 | 1.01522 | .180 | .200 |
| | -Shape Concern | 4.4375 | 1.14496 | .145 | .200 |
| | -Weight Concern | 3.7000 | 1.50067 | .268 | .200 |
| SEDS | -Assertiveness | 26.1167 | 4.60540 | .134 | .200 |
| | -Self Esteem | 27.6000 | 10.88742 | .452 | **.000** |
| | -Self Directed Hostility | 23.2167 | 11.31361 | .171 | .200 |
| | -Self Perceived External Control | 25.1667 | 8.66641 | .131 | .200 |
| | -Anorexic Dietary Cognitions | 25.6833 | 11.82056 | .257 | .200 |
| | -Anorexic Dietary Behaviours | 21.6333 | 8.28895 | .115 | .200 |
| | -Bulimic Dietary Cognitions | 26.2333 | 15.50467 | .190 | .200 |
| | -Bulimic Dietary Behaviours | 14.8167 | 14.18301 | .313 | .068 |
| OAS | Total | 38.5000 | 9.20326 | .225 | .200 |
| ISS | -Self Esteem | 7.3333 | 4.50185 | .283 | .144 |
| | -Shame | 63.3333 | 13.53021 | .171 | .200 |
| CORE | -Wellbeing | 2.5833 | .94428 | .260 | .200 |
| | -Problems | 2.7361 | .81721 | .224 | .200 |
| | -Functioning | 2.1389 | .72776 | .227 | .200 |
| | -Risk | .4167 | .78705 | .375 | **.008** |
| | -Total | 2.0980 | .73250 | .161 | .200 |
| FSCSC | -Self Correction | 27.5000 | 8.40833 | .204 | .200 |
| | -Self Persecution | 12.1667 | 9.745081 | .294 | .114 |
| FSCRS | -Inadequate Self | 25.3333 | 4.88535 | .361 | **.014** |
| | -Reassure Self | 10.6667 | 8.47742 | .150 | .200 |
| | -Hated Self | 10.5000 | 5.12835 | .146 | .200 |
| SCS | -Total Compassion | 54.50 | 18.338 | .163 | .200 |

## 6.6 – Data Analysis

The data were analysed using SPSS 17, using one-way repeated measures (ANOVA), T-Tests and post hoc tests. These tests are recommended for small subject numbers and repeated measures (Field, 2005).

### 6.6.1 – Research Question 1:

**Is Compassion Focused Therapy (CFT) effective in the treatment of individuals with low weight Eating Disorders?**

To assess the overall effectiveness of the programme up to session 40 a paired samples t-test was used.

Table 14: Results of paired t-tests for all scales between assessment and session 40

| Scale | Subscale | Mean Score Time1 (Assessment) | Mean Score Time 3 (Session 40) | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|
| EDE-Q | -Restraint | 4.48 (SD=.94) | 2.32 (SD=1.21) | 3.100 | 4 | **.036*** ** |
| | -Eating Concern | 4.28 (SD=.74) | 2.24 (SD=1.68 | 2.990 | 4 | **.040*** ** |
| | -Shape Concern | 4.80 (SD=.81) | 3.55 (SD=1.58) | 2.644 | 4 | **.057** ** |
| | -Weight Concern | 4.12 (SD=1.22) | 3.12 (SD=1.55) | 2.469 | 4 | **.069** ** |
| SEDS | -Assertiveness | 26.80 (SD=4.79) | 20.54 (SD=7.43) | 1.846 | 4 | **.139** * |
| | -Self Esteem | 26.82 (SD=11.98) | 23.08 (SD=13.19) | 3.632 | 4 | **.022*** ** |
| | -Self Directed Hostility | 26.06 (SD=9.97) | 18.82 (SD=7.94) | 2.679 | 4 | **.055** ** |
| | -Self Perceived External Control | 25.32 (SD=9.68) | 14.84 (SD=14.39) | 2.402 | 4 | **.074** ** |
| | -Anorexic Dietary Cognitions | 29.76 (SD=7.07) | 23.68 (SD=10.29) | 2.331 | 4 | **.080** ** |
| | -Anorexic Dietary Behaviours | 23.82 (SD=7.07) | 9.48 (SD=6.76) | 4.132 | 4 | **.014*** ** |
| | -Bulimic Dietary Cognitions | 31.08 (SD=11.15) | 31.12 (SD=11.44) | -.007 | 4 | .994 |
| | -Bulimic Dietary Behaviours | 16.44 (SD=15.22) | 14.82 (SD=9.50) | .218 | 4 | .838 |
| OAS | Total | 36.40 (SD=8.53) | 37.40 (SD=16.05) | -.114 | 4 | .915 |
| ISS | -Self Esteem | 7.60 (SD=4.98) | 9.80 (SD=6.09) | -.961 | 4 | .391 |
| | -Shame | 62.00 (SD=13.53) | 60.80 (SD=29.01) | .135 | 4 | .899 |
| CORE | -Wellbeing | 2.45 (SD=.99) | 1.80 (SD=.85) | 5.099 | 4 | **.007*** ** |
| | -Problems | 2.55 (SD=.76) | 1.80 (SD=.79) | 3.985 | 4 | **.016*** ** |
| | -Functioning | 2.11 (SD=.81) | 1.23 (SD=.69) | 4.342 | 4 | **.012*** ** |
| | -Risk | .46 (SD=.87) | .23 (SD=.52) | 1.429 | 4 | .226 |
| | -Total | 2.01 (SD=.79) | 1.32 (SD=.66) | 4.821 | 4 | **.009*** ** |
| FSCSC | -Self Correction | 29.00 (SD=8.45) | 34.40 (SD=15.72) | -.997 | 4 | .375 |
| | -Self Persecution | 12.80 (SD=10.75) | 13.60 (SD=9.55) | -.349 | 4 | .744 |
| FSCRS | -Inadequate Self | 25.60 (SD=5.41) | 26.60 (SD=7.19) | -.328 | 4 | .759 |
| | -Reassure Self | 11.00 (SD=9.43) | 13.40 (SD=6.87) | -1.329 | 4 | .255 |
| | -Hated Self | 10.40 (SD=5.72) | 10.40 (SD=5.59) | .000 | 4 | 1.00 |
| SCS | -Total Compassion | 51.00 (SD=18.12) | 58.40 (SD=13.75)) | -2.167 | 4 | **.096** ** |

***significant at p<0.05; **significant at p<0.1; *significant at p<0.15

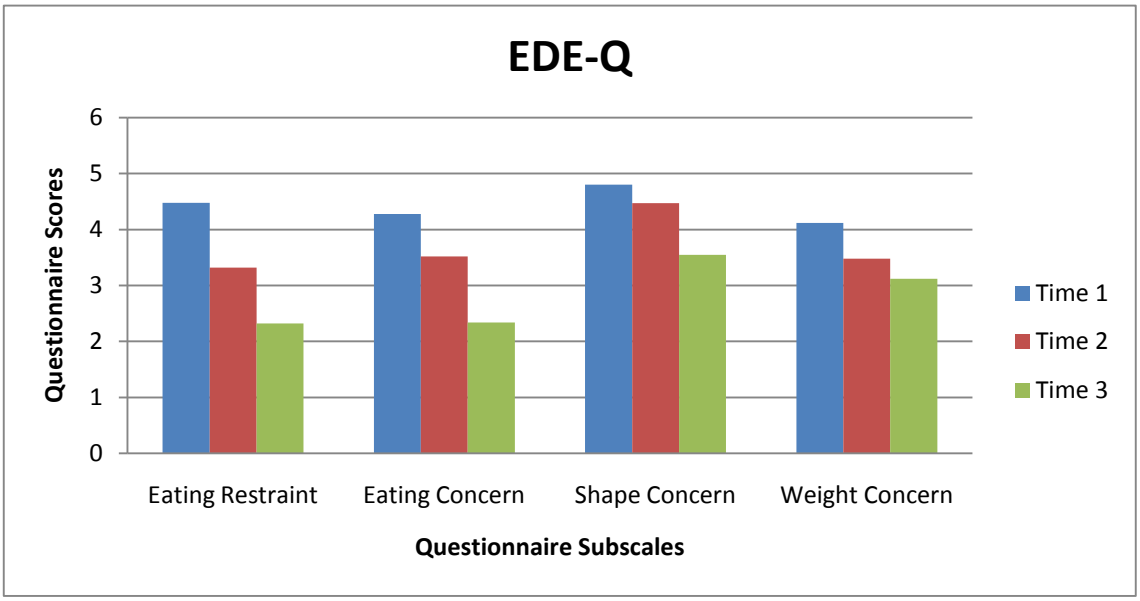
Key significant findings can be seen from Table 14 if P<0.15. Stevens (1996) suggests that when small group sizes are involved it may be necessary to adjust the alpha level to compensate (cut off of .10 or .15 rather than .05). Stevens (1996) uses the example of n=20, in this instance with a sample size n=5 for analysis p<.15 will be used.

EDE-Q:

The EDE-Q was significant across all four subscales, showing reduction in core eating disorder cognitions and behaviours.

One way repeated measures ANOVA was applied to establish whether the significance lay between the three time points (assessment, session 20 and session 40).

Figure 4: Histogram showing mean scores for the EDE-Q on each subscale at the three time points.




Eating Restraint:

The results of the ANOVA indicated that there was a statistically significant difference in Eating Restraint test scores of .017 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values

showed a decrease in restraint from assessment (Md = 4.2) to session 20 (Md = 2.8) and a further decrease at session 40 (Md = 2.2).The means and standard deviations have already been presented in table 12. There was a significant effect for restraint, Wilks' Lamda = .065,f (2,3) = 21.43, multivariate partial eta squared =.93 (very large effect size). Post hoc tests report that the main significance occurs between time point 2 and time point 3 (.006). Participants were able to commence the meal planning process utilising mechanical eating, whereby they train themselves to normalise their eating, effectively bringing their appetite system back on line. This lessens the control and restraint over eating and is reflected in the reduction of their scores.

Eating Concern:

The results of the ANOVA indicated that there was a statistically significant difference in Eating Concern test scores of .060 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in concern from assessment (Md = 4.2) to session 20 (Md = 3.4) and a further decrease at session 40 (Md = 1.8). The means and standard deviations have already been presented in table 12. There was a significant effect for eating concern, Wilks' Lamda = .153,f (2,3) = 8.28, multivariate partial eta squared =.84 (very large effect size). Post hoc tests report that the main significance occurs between time point 2 and time point 3 (.039).

Shape Concern:

The results of the ANOVA indicated that there was a statistically significant difference in shape concern test scores of .045 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in concern from assessment (Md = 4.5) to session 20 (Md = 3.8) and a further decrease at session 40 (Md = 2.8). The means and standard deviations have already been presented in table 12. There was a significant effect for shape concern, Wilks' Lamda = .126, f (2,3) = 10.43, multivariate partial eta squared =.87 (very large effect size). Post hoc tests report that the main significance occurs between time point 2 and time point 3 (.020).

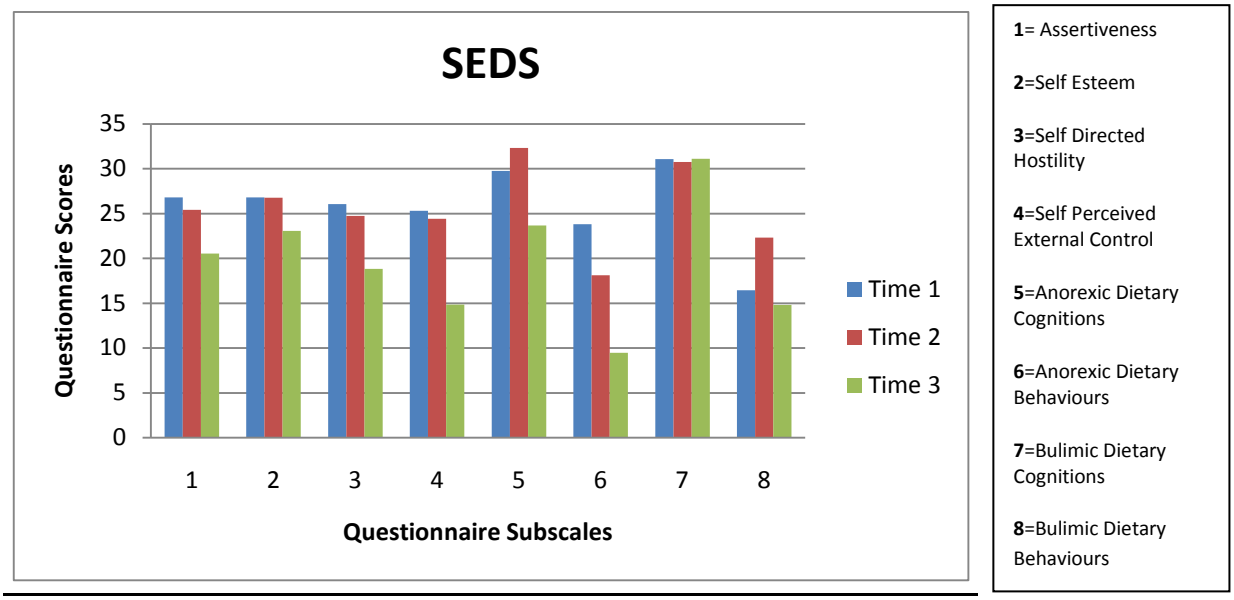
Weight Concern:

Despite a reduction in mean scores and significance with the t-test (.069), no significance was found following completion of the ANOVA (.249). Inspection of the median values showed a decrease in concern from assessment (Md = 3.9) to session 20 (Md = 3.4) and a further decrease at session 40 (Md = 2.6). Post hoc tests also revealed no statistical significance.

SEDS:

The SEDS was significant across six of the eight subscales, also showing reduction in core eating disorder cognitions and behaviours.

Figure 5: Histogram depicting mean scores for SEDS subscales at each of the three time points.




Assertiveness:

Despite a reduction in mean scores and significance with the t-test (.139), no significance was found following completion of the ANOVA (.328). Inspection of the median values showed an increase in assertiveness from assessment (Md = 26.3) to session 20 (Md = 27.3) with a large decrease at session 40 (Md = 18.4). Post hoc tests also revealed no statistical significance. This identifies that although there was an overall significance achieved, no significant results can be found between the three time points.

Self-Esteem:

The results of the ANOVA indicated that there was a statistically significant difference in the self-esteem subscale test scores of .108 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in self-esteem from assessment (Md = 21.35) to session 20 (Md = 21.20) and a further decrease at session 40 (Md = 12.40). The means and standard deviations have already been presented in table 12. There was a significant effect for self-esteem, Wilks' Lamda = .227, f (2,3) = 5.11, multivariate partial eta squared =.77 (very large effect size). Post hoc tests report that the main significance occurs between time point 2 and time point 3 (.066).

Self-Directed Hostility:

The results of the ANOVA indicated that there was a statistically significant difference in the self-directed hostility subscale test scores of .064 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in self-directed hostility from assessment (Md = 22.8) to session 20 (Md = 22.5) and remained stable at session 40 (Md = 22.5). The means and standard deviations have already been presented in table 12. There was a significant effect for self-directed hostility, Wilks' Lamda = .161, f (2,3) = 7.84, multivariate partial eta squared =.83 (very large effect size). Post hoc tests reported a level of .166 between time points 1 and 3, however this was not statistically significant, The post hoc findings are likely due to the small sample size.

Self-Perceived External Control:

Despite a reduction in mean scores and significance with the t-test (.074), no significance was found following completion of the ANOVA (.245). Inspection of the median values showed a decrease in self-perceived external control from assessment (Md = 25.6) to session 20 (Md = 23.3) with a large decrease at session 40 (Md = 7.6). Post hoc tests also revealed no statistical significance. This identifies that although there was an overall significance achieved, no significant results can be found between the three time points.

Anorexic Dietary Cognitions:

The results of the ANOVA indicated that there was a statistically significant difference in the Anorexic Dietary Cognitions subscale test scores of .141 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed an increase in Anorexic Dietary Cognitions from assessment (Md = 25.95) to session 20 (Md = 33.60)) and then a significant decrease at session 40 (Md = 18.80). The means and standard deviations have already been presented in table 12. There was a significant effect for Anorexic Dietary Cognitions, Wilks' Lamda = .221), f (2,3) = 4.03, multivariate partial eta squared =.72 (very large effect size). Post hoc tests report that the main significance occurs between time point 2 and time point 3 (.091).

Anorexic Dietary Behaviours:

The results of the ANOVA indicated that there was a statistically significant difference in the Anorexic Dietary Behaviours subscale test scores of .082 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in Anorexic Dietary Behaviours from assessment (Md = 21.35) to session 20 (Md = 21.20)) and then a significant decrease at session 40 (Md = 12.40). The means and standard deviations have already been presented in table 12. There was a significant effect for Anorexic Dietary Behaviours, Wilks' Lamda = .188), f (2,3) = 6.47, multivariate partial eta squared =.81 (very large effect size). Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.043).

There is no statistical significance on the remaining two subscale's, however as can be seen by Figure 5, there is a significant reduction in all mean scores on the SEDS scale with exception of Bulimic Dietary Behaviours which shows an increase in mean scores. This may be explained by the participant's subjective belief that they are engaging in dietary binging due to reactivation of the appetite system.

OAS:

Figure 6: OAS mean scores over three time points:

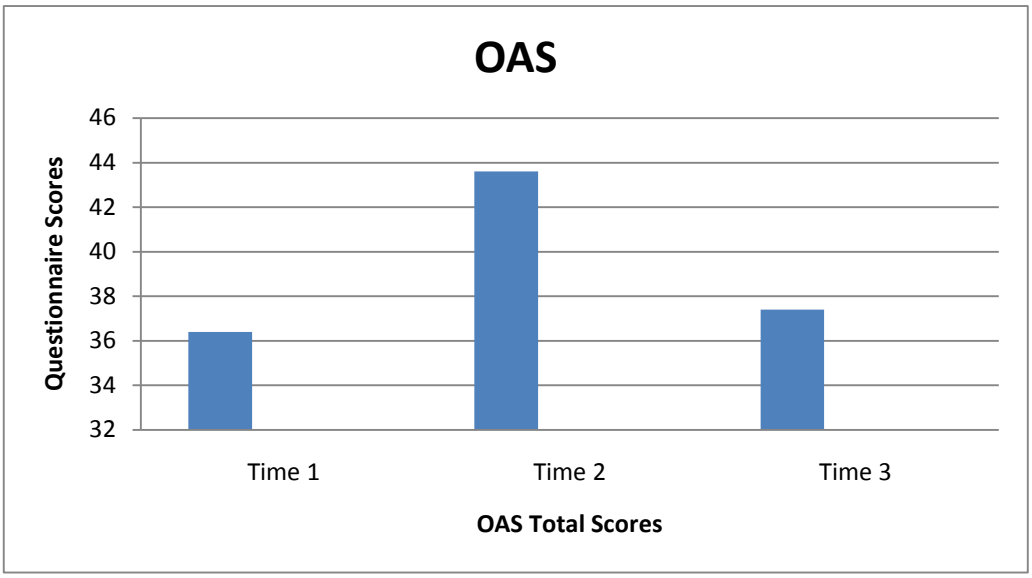



Figure 6 shows a mean of 36.40 at assessment and then an increase to 43.60 at session 20. This may be explained by an increase in body image concerns and perceptions of how they are perceived as eating behaviours and cognitions are challenged and the impact on feelings of external shame. By session 40 it has once again decreased to 37.40, however this score will need further exploration during the maintenance phase of treatment.

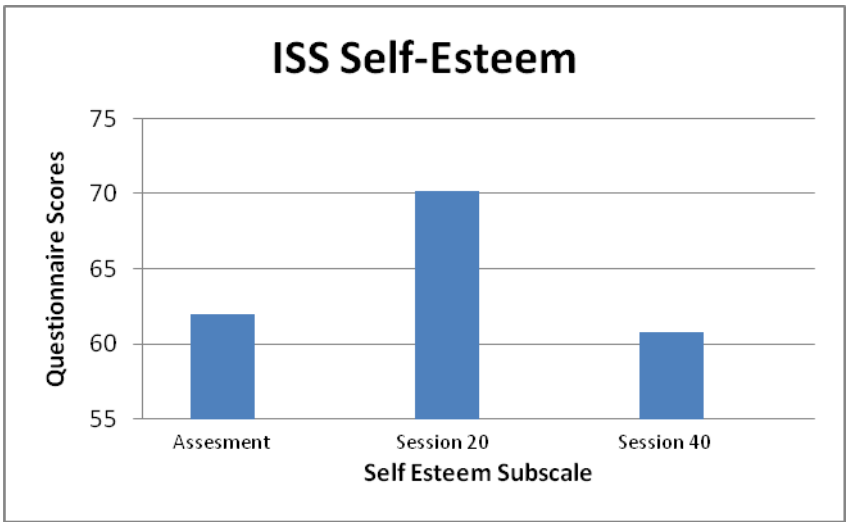
The results of the ANOVA indicated that there was a statistically significant difference in the OAS scores of .060 across the three time points (assessment, session 20 and session 40) with $p<.15$. Inspection of the median values showed an increase in scores from assessment (Md = 40.50) to session 20 (Md = 42.00) and then a significant decrease to session 40 (Md = 34.00). The means and standard deviations have already been presented in table 12. There was a significant effect for

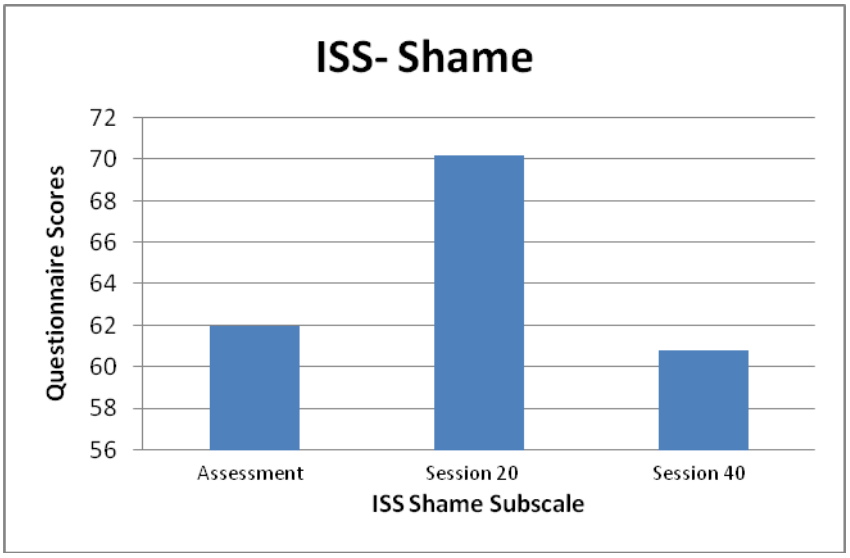
OAS, Wilks' Lamda = .153, f (2,3) = 8.29, multivariate partial eta squared =.84 (very large effect size). Post hoc tests reported a level of .209 between time points 1 and 3, however this was not statistically significant, The post hoc findings are likely due to the small sample size.

ISS:

Figure 7 then shows the programmes impact on problems with self-esteem and internal feelings of shame with an increase in mean scores at session 20 before decreasing once again at session 40. Participants described, as their eating behaviours were challenged and weight increased, feelings of shame and self-esteem were more challenging, as the group programme continued upward to session 40 patients described an improvement in self-esteem and a lesser degree of shame.

Figure 7: ISS Self-Esteem and Shame Subscale mean scores



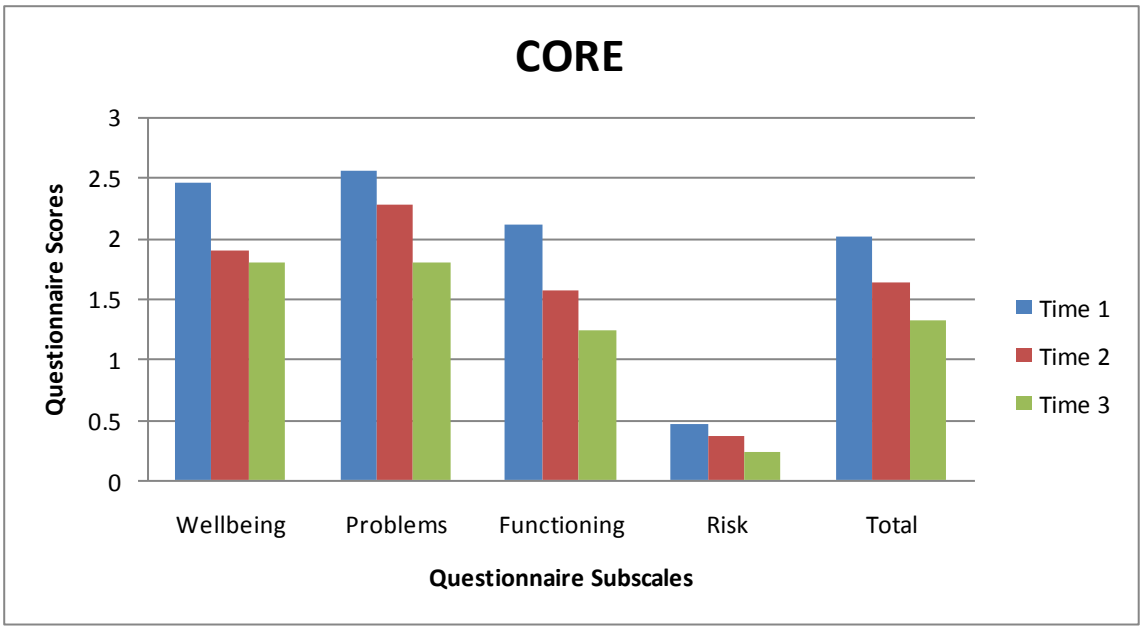



No statistical significance using ANOVA was found with either of the ISS subscales (self-esteem =.605, shame =.180).

CORE:

The CORE was significant across four of the five subscales, showing an improvement in overall wellbeing, functioning and problems. The subscale which showed no statistical significance was the Risk subscale (.465), this is likely due to this subscale being in violation of normality. The data was skewed as no high scores were present in the sample, which is due to the strict inclusion criteria for the eating disorder service and for the study in relation to psychiatric risk.

Figure 8: Histogram depicting mean scores on CORE subscales across the three time points.




Wellbeing:

The results of the ANOVA indicated that there was a statistically significant difference in the wellbeing subscale test scores of .034 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in problems with wellbeing from assessment (Md = 2.62) to session 20 (Md = 1.50) and a slight increase at session 40 (Md = 1.75). The means and standard deviations have already been presented in table 12. There was a significant effect for wellbeing, Wilks' Lamda = .104), f (2,3) = 12.93, multivariate partial eta squared =.89 (very large effect size). Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.021).

Problems:

The results of the ANOVA indicated that there was a statistically significant difference in the problems subscale test scores of .087 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in problems from assessment (Md = 2.50) to session 20 (Md = 2.00) to session 40 (Md = 1.83). The means and standard deviations have already been presented in table 12. There was a significant effect for problems, Wilks' Lamda = .196, f (2,3) = 6.13, multivariate partial eta squared =.80 (very large effect size).

Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.049).

Functioning:

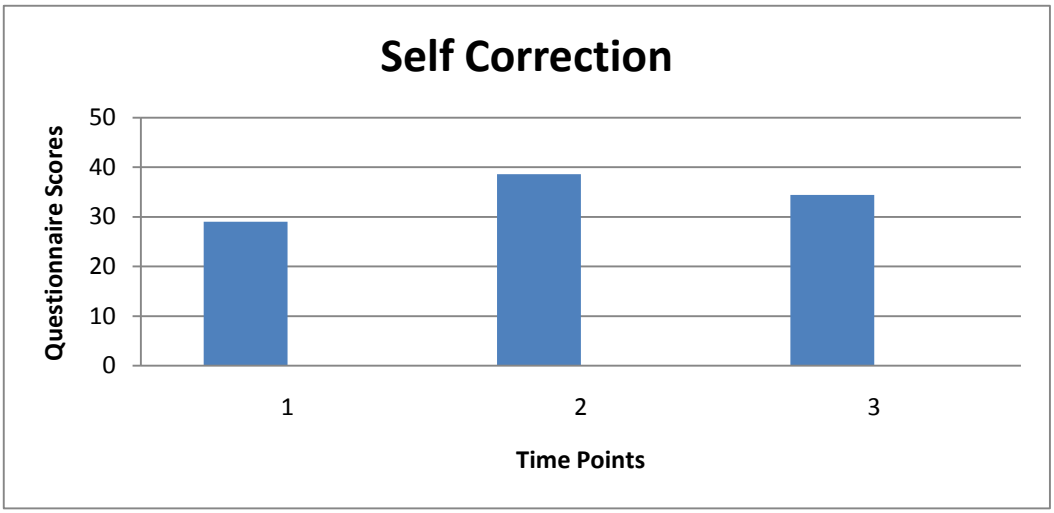
The results of the ANOVA indicated that there was a statistically significant difference in the functioning subscale test scores of .069 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in problems with functioning from assessment (Md = 2.25) to session 20 (Md = 1.50) to session 40 (Md = 1.00). The means and standard deviations have already been presented in table 12. There was a significant effect for functioning, Wilks' Lamda = .168, f (2,3) = 7.44, multivariate partial eta squared =.83 (very large effect size). Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.037)

Total:

The results of the ANOVA indicated that there was a statistically significant difference in the total scores of .056 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed a decrease in the total score from assessment (Md = 2.02) to session 20 (Md = 1.32) to session 40 (Md = 1.26). The means and standard deviations have already been presented in table 12. There was a significant effect for functioning, Wilks' Lamda = .146, f (2,3) = 8.76, multivariate partial eta squared =.85 (very large effect size). Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.026).

FSCSC:

Figure 9: FSCSC Subscale mean scores for Self-Correction and Self-Persecution:





Self-Correction:

The self-correction subscale showed an increase in mean scores from time point 1 (m=29.00) to time point 2 (m=38.60), then a reduction at time point 3 (m=34.40), with a non significant value of .231 following ANOVA. This subscale seems to be following similar trends to aforementioned subscales and it may not be fully explained until exploration at follow up.

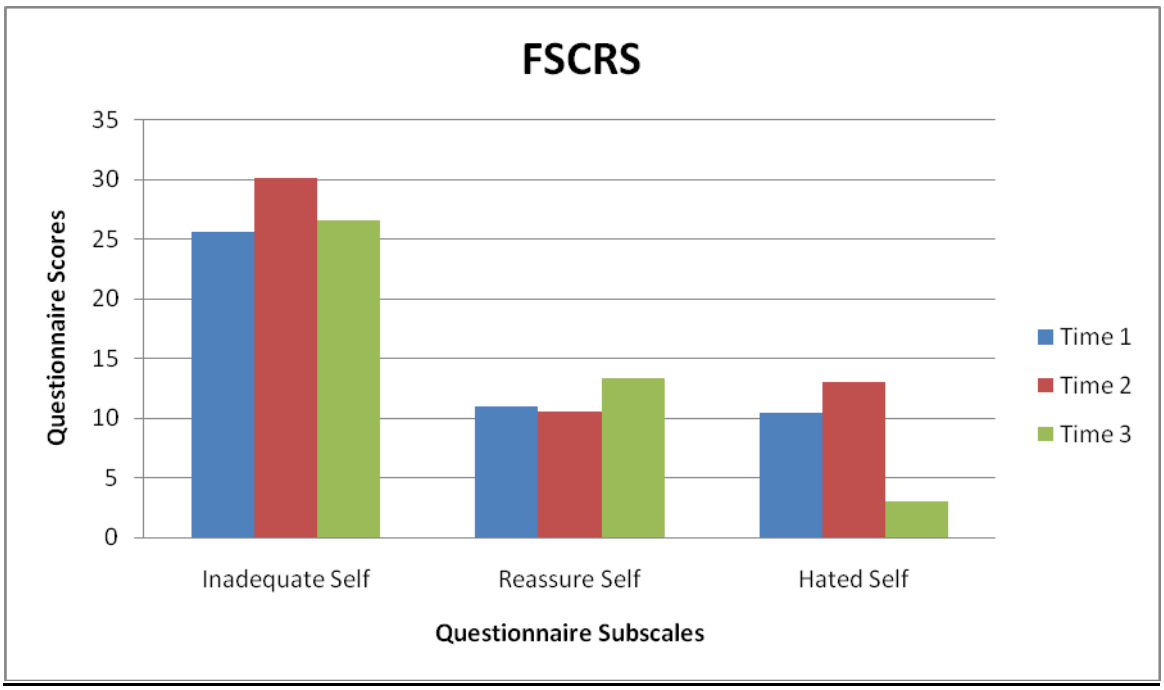
Self-Persecution:

The self-persecution subscale showed an increase in mean scores at time point 1 (m=12.80) to time point 2 (m=19.80) before decreasing at time point 3 (m=13.60), with a non significant result of .172 following ANOVA, however post hoc tests

revealed a slight statistical significance of .145 between of the time point 1 and time point 2.

FSCRS:

Figure 10: FSCRS  Subscale mean scores for each of the time points:




Inadequate Self:

The inadequate self subscale shows an increase in mean scores between time point 1 (m= 25.60) to time point 2 (m= 30.20), before reducing once again at time point 3 (m= 26.60) with ANOVA providing a significance value of.257. This once again is not reflected in qualitative findings, however needs to be accepted and explored further. This will need to be focused upon during the follow up phase of the research.

Reassure Self:

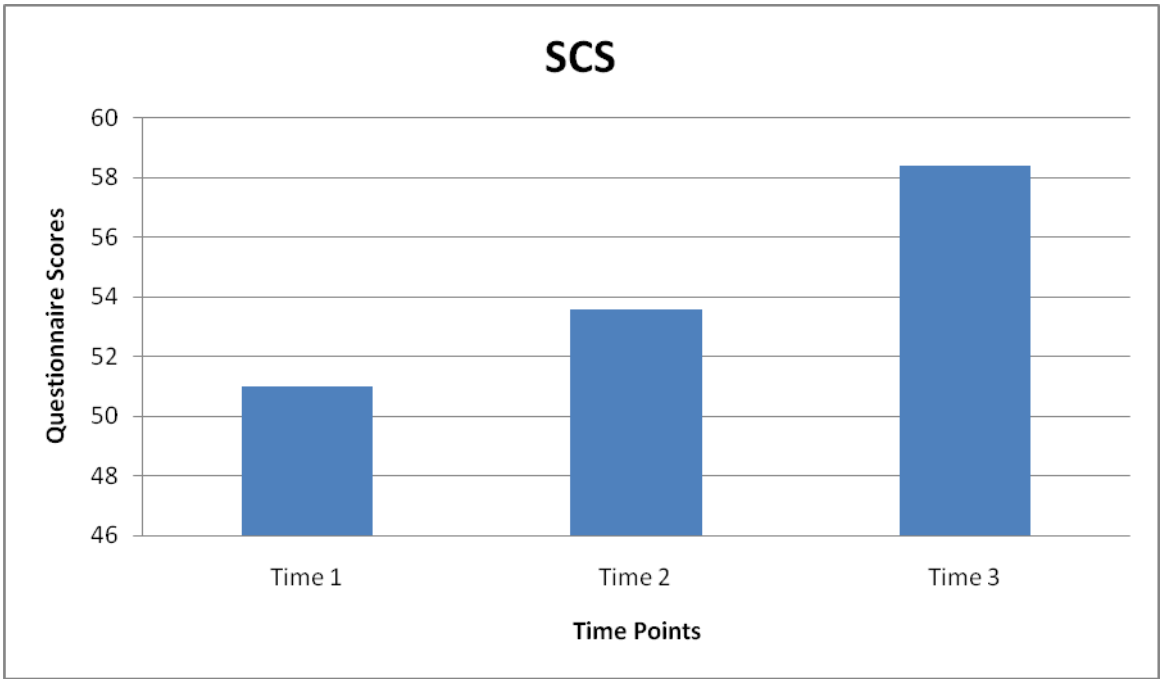
The reassure self subscale shows a slightly different trend with mean scores reducing from time point 1 (m=11.00) to time point 2 (m=10.60) before increasing at time point 3(m= 13.40), the ANOVA test yielded a significance value of .247. Once again this will require further exploration at follow up.

Hated Self:

The hated self subscale yielded more promising results with a slight increase in mean scores between time point 1 (m=10.40) to time point 2 (m=13.00) before reducing at time point 3 (m=10.40), however ANOVA produced a  non significance of .300.

SCS:

Figure 11: SCS Total Compassion mean scores




Compassion:

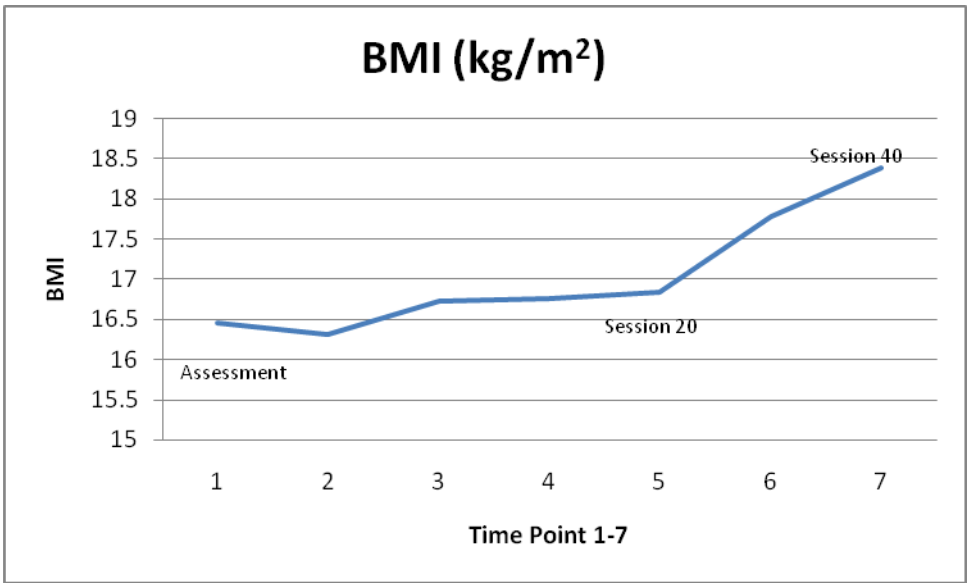
The Compassion subscale of the SCS shows an increase in mean scores across the three time points (P=.096). This means that participants recorded an increase in compassion over time. Mean scores were: 51.00 at time point 1; 53.6 at time point 2; and 58.4 at time point 3. The ANOVA showed a significance value of = .383, therefore finding no significance. This increase in scores supports the positive qualitative statements from the participants as shown in Chapter 5. Verbally participants identified an improvement in compassion, which the quantitative data supports. Neff (2003) identified that patients may be unaware of the compassion they are experiencing, or find it difficult to record and this may go some way to describe the small significance, however unless this study were to be replicated on a larger scale this point would be difficult to validate.

Weight restoration:

Body Mass Index:

One of the main aims of the study was to provide a longer period of treatment to enable weight gain, thus Body Mass Index was measured regularly throughout the treatment programme. At assessment (time point 1) mean BMI was 16.46 (SD= .65), with a range of 15.4 – 17, at session 20 mean BMI was 16.83 (SD=.99), with a range of 15.5 – 17.9, at session 40 (time point 3) mean BMI was 18.38 (SD=1.08), with a range of 16.6 – 19.2. Thus identifying that most significant weight gain took place between session 20 and session 40. Figure 13 supports this.

Figure 12: Line Graph depicting BMI across all time points.




A paired samples t-test was conducted to evaluate the impact of the group programme on participants BMI scores from assessment to session 40. There was a statistically significant increase in BMI from assessment (m=16.42, SD=.72) to session 40 (m=17.78, SD=1.13), p<.05 (.025; two tailed).

The results of the ANOVA indicated that there was a statistically significant difference in the BMI scores of .014 across the three time points (assessment, session 20 and session 40) with p<.15. Inspection of the median values showed an increase in BMI from assessment (Md = 16.8), to session 20 (Md =17.1) and a further

increase at session 40 (Md = 18.2). The means and standard deviations have already been presented in table 12. There was a significant effect for functioning, Wilks' Lamda = .057, f (2,3) = 24.69, multivariate partial eta squared =.94 (very large effect size). Post hoc tests report that the main significance occurs between time point 1 and time point 3 (.076).

Follow up:

At time of writing no follow up data were available, despite the questionnaires being given to the participants. Questionnaires were given post maintenance phase of treatment (3 months after session 40) to each of the 6 participants and to date only 2 participants have returned their completed questionnaires. This means for the purpose of this dissertation results can only be reported from assessment to end of intensive treatment phase (session 40), and no follow-up group comparisons can be made.

### 6.6.2 – Research Question 2:

**Is a 47 session CFT group programme more effective than a 27 session group programme in low weight eating disorders?**

The data from 6 low weight patients who had been through standard treatment (27 sessions) were extracted from the database held by Coventry Eating Disorder Service to allow for comparison with the participants in this study. Data was anonymous to the author with only numeric data being received (the data having been extrapolated by a psychology assistant working within Coventry Eating Disorder Service).

Table 15 shows the mean values for time point 1 (assessment) and time point 2 (session 20). The data were normally distributed despite the small sample size, having been explored using measures of skewness, kurtosis and boxplots. Parametric tests were applied as all assumptions were met and to ensure robust statistical analysis was achieved. Paired samples t-test was used, with the aim being to

compare the mean scores for the same group of people on two different occasions (assessment and session 20). Table 15 also shows the results of this test, identifying where clinical significance lay.

Table 15: Mean scores and T-Test results for the standard treatment programme

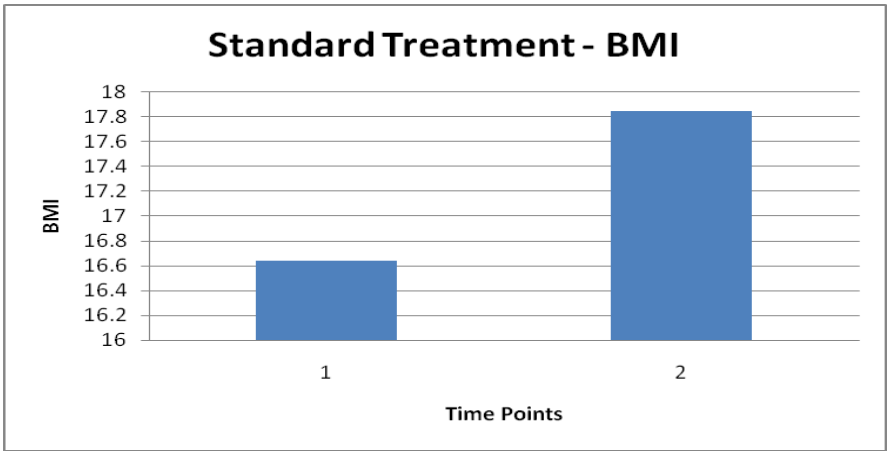
| Scale | Subscale | Mean Score Time 1(Assessment) | Mean Score Time 2 (Session 20) | Sig (2 tailed) |
|---|---|---|---|---|
| EDE-Q | -Restraint | 3.8 (SD=1.0) | 2.56 (SD=1.08) | **.018*** ** |
| | -Eating Concern | 4.2 (SD=.90) | 3.04 (SD=1.51) | **.089** ** |
| | -Shape Concern | 4.42 (SD.85) | 3.82 (SD=1.24) | .239 |
| | -Weight Concern | 3.84 (SD=.51) | 2.92 (SD=1.39) | .262 |
| SEDS | -Assertiveness | 21.55 (SD=17.61) | 15.55 (SD=19.64) | **.110** * |
| | -Self Esteem | 24.12 (SD=6.91) | 19.92 (SD=8.06) | .475 |
| | -Self Directed Hostility | 23.22 (SD=10.78) | 20.02 (SD=5.80) | .651 |
| | -Self Perceived External Control | 24.92 (SD=15.50) | 17.42 (SD=8.30) | .502 |
| | -Anorexic Dietary Cognitions | 21.02 (SD=14.37) | 19.52 (SD=12.59) | .586 |
| | -Anorexic Dietary Behaviours | 33.85 (SD=9.66) | 22.15 (SD=16.01) | **.064** ** |
| | -Bulimic Dietary Cognitions | 17.57 (SD=9.96) | 13.35 (SD=11.40) | .369 |
| | -Bulimic Dietary Behaviours | 25.95 (SD=15.70) | 14.32 (SD=10.30) | **.085** ** |
| OAS | Total | 32.80 (SD=21.14) | 38.60 (SD=14.25) | .349 |
| ISS | -Self Esteem | 12.60 (SD=7.92) | 13.20 (SD=4.32) | .851 |
| | -Shame | 46.20 (SD=18.18) | 52.40 (SD=10.76) | .313 |
| CORE | -Wellbeing | 1.55 (SD=.45) | 1.1 (SD=.65) | **.137*** |
| | -Problems | 1.95 (SD=.58) | 1.75 (SD=.67) | .598 |
| | -Functioning | 1.74 (SD=.50) | 1.4 (SD=.29) | .278 |
| | -Risk | 1.40 (SD=.25) | 1.1 (SD=.53) | .152 |
| | -Total | 1.73 (SD=.41) | 1.4 (SD=.43) | .306 |
| FSCSC | -Self Correction | 12.00 (SD=9.64) | 12.66 (SD=1.15) | .904 |
| | -Self Persecution | 9.66 (SD=12.42) | 9.66 (SD=4.61) | 1.00 |
| FSCRS | -Inadequate Self | 14.15 (SD=3.75) | 14.00 (SD=3.74) | .960 |
| | -Reassure Self | 19.75 (SD=8.05) | 18.00 (SD=3.36) | .730 |
| | -Hated Self | 8.00 (SD=2.94) | 7.75 (SD=4.11) | .935 |
| SCS | -Total Compassion | 51.00 (SD=18.12) | 85.50 (SD=.70) | .718 |

***significant at p<0.05; **significant at p<0.1; *significant at p<0.15

It can be seen from the results that overall there is minimal significance achieved, with only the EDE-Q restraint subscale showing a significance of .018 (p<0.05). If the alpha level is increased to <0.15 as Stevens (1996) recommends for small sample sizes then three further results show clinical significance; EDE-Q eating concern (.089), SEDS Assertiveness (.110) and Anorexic Dietary Behaviours (.064), CORE wellbeing (.137) and Bulimic Dietary Behaviours (.085).

BMI

Figure 13: Histogram showing BMI mean scores for standard treatment




A paired-samples t-test was conducted to evaluate the impact of the intervention on BMI. There was a statistically significant increase from Time 1 (assessment; M=16.64, SD.87) to Time 2 (session 20; M=17.85, SD1.0), t (5) = -5.1, p=0.004 (therefore p<.005 two tailed). The mean increase in BMI scores was 1.21 with a 95% confidence interval ranging from -1.81 to -.59, with a large effect size.

Group comparisons:

An independent-samples t-test was been used to compare the mean scores at session 20 for both the low weight programme and standard treatment, with the results being displayed in Table 16:

Table 16: Results of independent t-tests for group comparisons at session 20

| Scale | Subscale | Mean Score Session 20 (Low weight programme) | Mean Score Session 20 (Standard Treatment) | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|
| EDE-Q | -Restraint | 2.32 (SD=1.21) | 2.56 (SD=1.08) | .965 | 8 | .363 |
| | -Eating Concern | 2.24 (SD=1.68 | 3.04 (SD=1.51) | .522 | 8 | .615 |
| | -Shape Concern | 3.55 (SD=1.58) | 3.82 (SD=1.24) | .807 | 8 | .443 |
| | -Weight Concern | 3.12 (SD=1.55) | 2.92 (SD=1.39) | .605 | 8 | .562 |
| SEDS | -Assertiveness | 20.54 (SD=7.43) | 15.55 (SD=19.64) | .984 | 3.262 | .392a |
| | -Self Esteem | 23.08 (SD=13.19) | 19.92 (SD=8.06) | 1.398 | 7 | .205 |
| | -Self Directed Hostility | 18.82 (SD=7.94) | 20.02 (SD=5.80) | .769 | 7 | .467 |
| | -Self Perceived External Control | 14.84 (SD=14.39) | 17.42 (SD=8.30) | 1.107 | 7 | .305 |
| | -Anorexic Dietary Cognitions | 23.68 (SD=10.29) | 19.52 (SD=12.59) | 2.030 | 7 | .082** |
| | -Anorexic Dietary Behaviours | 9.48 (SD=6.76) | 22.15 (SD=16.01) | -.502 | 7 | .631 |
| | -Bulimic Dietary Cognitions | 31.12 (SD=11.44) | 13.35 (SD=11.40) | 2.300 | 7 | .055** |
| | -Bulimic Dietary Behaviours | 14.82 (SD=9.50) | 14.32 (SD=10.30) | .839 | 7 | .429 |
| OAS | Total | 37.40 (SD=16.05) | 38.60 (SD=14.25) | .569 | 8 | .585 |
| ISS | -Self Esteem | 9.80 (SD=6.09) | 13.20 (SD=4.32) | -1.440 | 8 | .188 |
| | -Shame | 60.80 (SD=29.01) | 52.40 (SD=10.76) | 1.732 | 6.08 | .133a |

| | | | | | | |
|---|---|---|---|---|---|---|
| CORE | -Wellbeing | 1.80 (SD=.85) | 1.1 (SD=.65) | 1.326 | 8 | .221 |
| | -Problems | 1.80 (SD=.79) | 1.75 (SD=.67) | .970 | 8 | .361 |
| | -Functioning | 1.23 (SD=.69) | 1.4 (SD=.29) | .458 | 5.20 | .666a |
| | -Risk | .23 (SD=.52) | 1.1 (SD=.53) | -1.811 | 8 | .108* |
| | -Total | 1.32 (SD=.66) | 1.4 (SD=.43) | .490 | 8 | .637 |
| FSCSC | -Self Correction | 34.40 (SD=15.72) | 12.66 (SD=1.15) | 4.161 | 7 | .004*** |
| | -Self Persecution | 13.60 (SD=9.55) | 9.66 (SD=4.61) | 2.173 | 7 | .066** |
| FSCRS | -Inadequate Self | 26.60 (SD=7.19) | 14.00 (SD=3.74) | 5.070 | 7 | .001*** |
| | -Reassure Self | 13.40 (SD=6.87) | 18.00 (SD=3.36) | -1.503 | 7 | .177 |
| | -Hated Self | 10.40 (SD=5.59) | 7.75 (SD=4.11) | 1.784 | 7 | .118* |
| SCS | -Total Compassion | 53.60 (SD=17.91) | 85.50 (SD=.70) | -3.975 | 4.03 | .016*** |

***significant at p<0.05; **significant at p<0.1; *significant at p<0.15

a – Levene's test for equality of variances was significant, so equal variances were not assumed

The results show a number of significant results when making group comparisons at session 20 for both the low weight programme and standard treatment. Each of the significant results show improved levels in standard treatment at this point in the programme.

BMI:

An independent-samples t-test was conducted to compare BMI scores at session 20 for both the low weight group and standard treatment. There was a slight significance for low weight (m=16.83, SD=.99) and standard treatment (m=17.85, SD=1.0; t(10)=-1.76, p=.108.

When looking at overall impact of treatment, and comparing standard treatment with the current study mean scores can be explored. Table 17 shows the mean scores at the respective intensive treatment end points, session 20 for standard treatment and session 40 for the current study. These scores are prior to any follow up (maintenance phase).

Table 17: Mean scores at treatment end for standard treatment and the low weight study group:

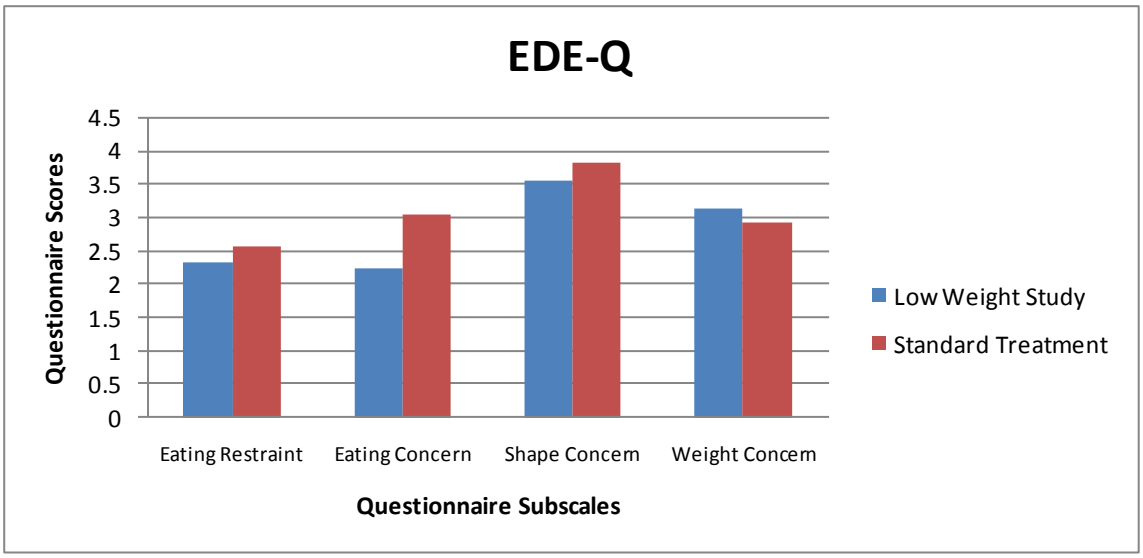
| Scale | Subscale | Low Weight Study Mean Scores (session 40) | Standard Treatment Mean Scores (session 20) |
|---|---|---|---|
| EDE-Q | -Restraint | 2.32 (SD=1.21) | 2.56 (SD=1.08) |
| | -Eating Concern | 2.24 (SD=1.68 | 3.04 (SD=1.51) |
| | -Shape Concern | 3.55 (SD=1.58) | 3.82 (SD=1.24) |

| | | | |
|---|---|---|---|
| | -Weight Concern | 3.12 (SD=1.55) | 2.92 (SD=1.39) |
| SEDS | -Assertiveness | 20.54 (SD=7.43) | 15.55 (SD=19.64) |
| | -Self Esteem | 23.08 (SD=13.19) | 19.92 (SD=8.06) |
| | -Self Directed Hostility | 18.82 (SD=7.94) | 20.02 (SD=5.80) |
| | -Self Perceived External Control | 14.84 (SD=14.39) | 17.42 (SD=8.30) |
| | -Anorexic Dietary Cognitions | 23.68 (SD=10.29) | 19.52 (SD=12.59) |
| | -Anorexic Dietary Behaviours | 9.48 (SD=6.76) | 22.15 (SD=16.01) |
| | -Bulimic Dietary Cognitions | 31.12 (SD=11.44) | 13.35 (SD=11.40) |
| | -Bulimic Dietary Behaviours | 14.82 (SD=9.50) | 14.32 (SD=10.30) |
| OAS | Total | 37.40 (SD=16.05) | 38.60 (SD=14.25) |
| ISS | -Self Esteem | 9.80 (SD=6.09) | 13.20 (SD=4.32) |
| | -Shame | 60.80 (SD=29.01) | 52.40 (SD=10.76) |
| CORE | -Wellbeing | 1.80 (SD=.85) | 1.1 (SD=.65) |
| | -Problems | 1.80 (SD=.79) | 1.75 (SD=.67) |
| | -Functioning | 1.23 (SD=.69) | 1.4 (SD=.29) |
| | -Risk | .23 (SD=.52) | 1.1 (SD=.53) |
| | -Total | 1.32 (SD=.66) | 1.4 (SD=.43) |
| FSCSC | -Self Correction | 34.40 (SD=15.72) | 12.66 (SD=1.15) |
| | -Self Persecution | 13.60 (SD=9.55) | 9.66 (SD=4.61) |
| FSCRS | -Inadequate Self | 26.60 (SD=7.19) | 14.00 (SD=3.74) |
| | -Reassure Self | 13.40 (SD=6.87) | 18.00 (SD=3.36) |
| | -Hated Self | 10.40 (SD=5.59) | 7.75 (SD=4.11) |
| SCS | -Total Compassion | 58.40 (SD=13.75) | 85.50 (SD=.70) |

Each of the self report measures is focused upon individually using histograms to visually display mean scores more effectively. Each subscale is then briefly discussed to allow for narrative on group comparisons and any findings that are achieved.

EDE-Q:

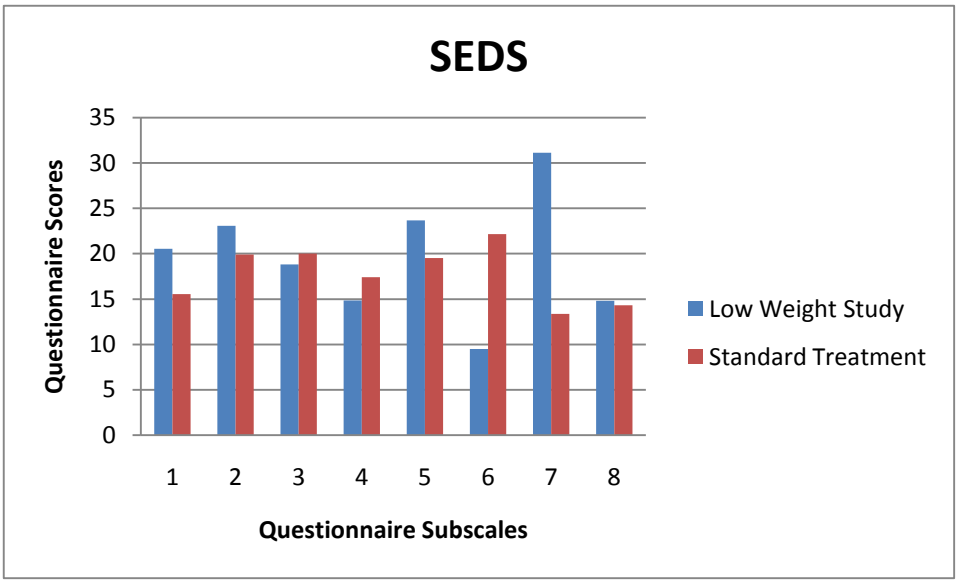
Figure 14: Histogram depicting mean scores for EDE-Q at end of treatment for both groups.




It can be seen by the above histogram that the low weight mean scores are lower than standard treatment on three of the four subscales by the end of treatment. With regard to weight concern the low weight results are higher showing a greater level of concern, this may be due to the fact that the weight restoration in the low weight group was higher therefore weight concern was higher. The patients in standard treatment remained underweight at treatment end so distress around weight may have been reduced.

SEDS:

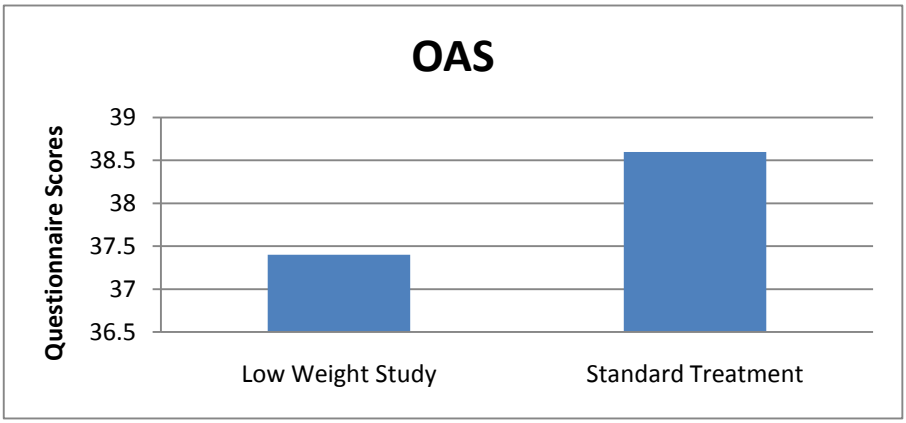
Figure 15: Histogram depicting mean scores for SEDS at end of treatment for both groups.




The SEDS showed mixed results with only three of the subscales showing positive results in favour of the current study. The low weight patients showed greater improvements in Self-Directed Hostility, Self-Perceived External Control and Anorexic Dietary Behaviours, however the remaining subscales showed greater improvement in standard treatment, which goes against the proposed hypothesis of this study. This will be further discussed during the discussion.

OAS:

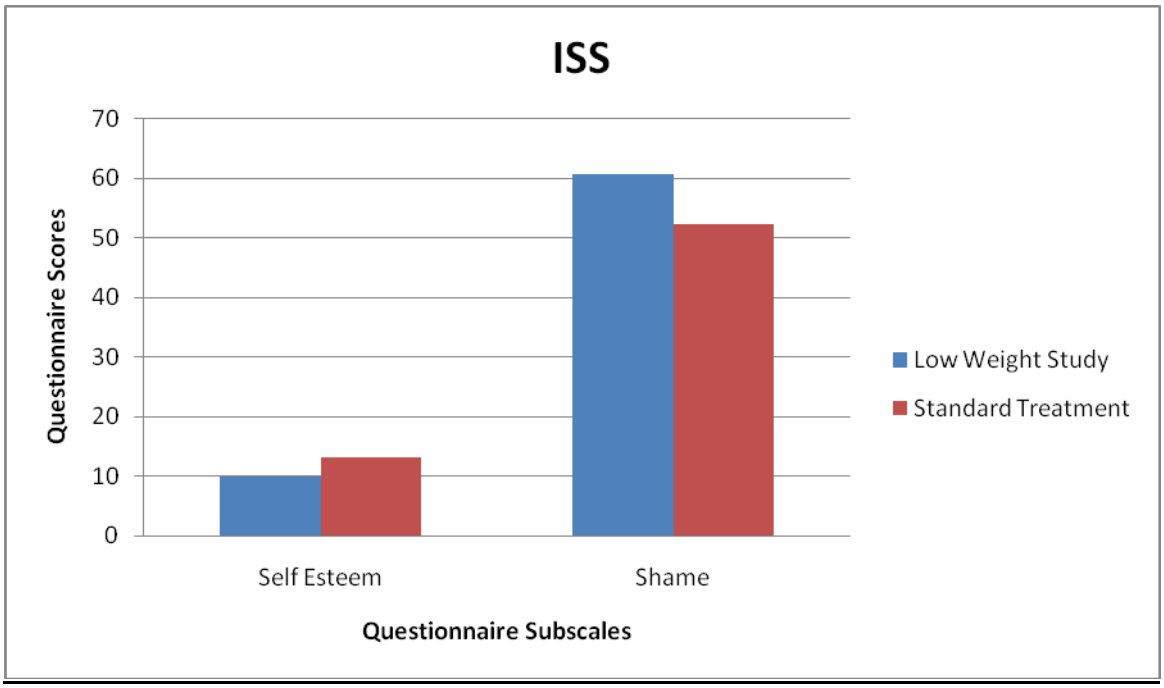
Figure 16: Histogram depicting mean scores for OAS at end of treatment for both groups.




The mean scores at end of treatment were significantly better for the low weight study with the OAS, identifying that perceived external shame reduced as a result of the extended treatment.

ISS:

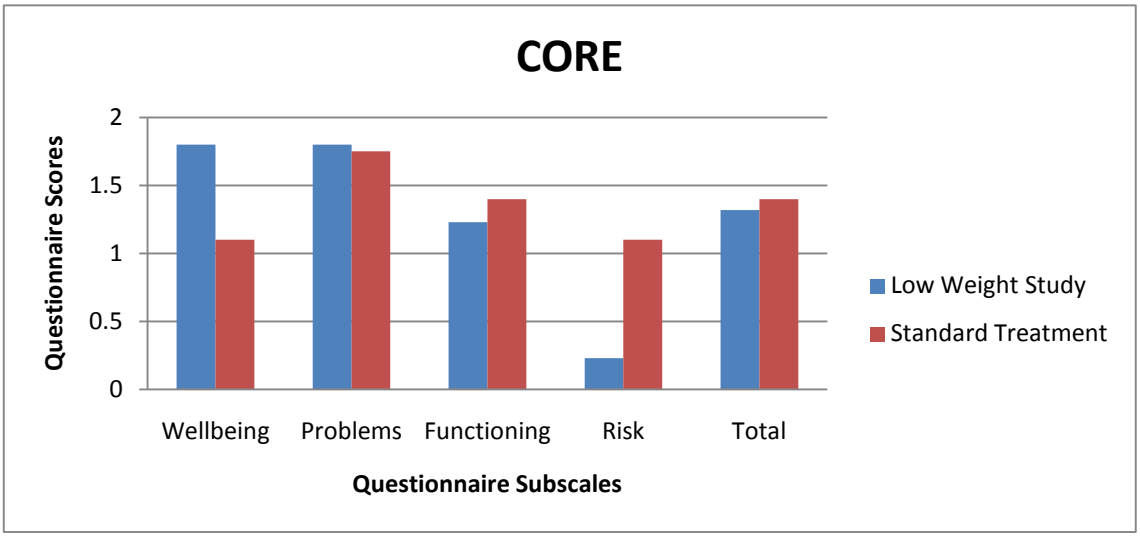
Figure 17: Histogram depicting mean scores for ISS at end of treatment for both groups.




The ISS once again shows mixed results with the low weight participants improving problems with self-esteem, however increasing with regard to internal shame.

CORE:

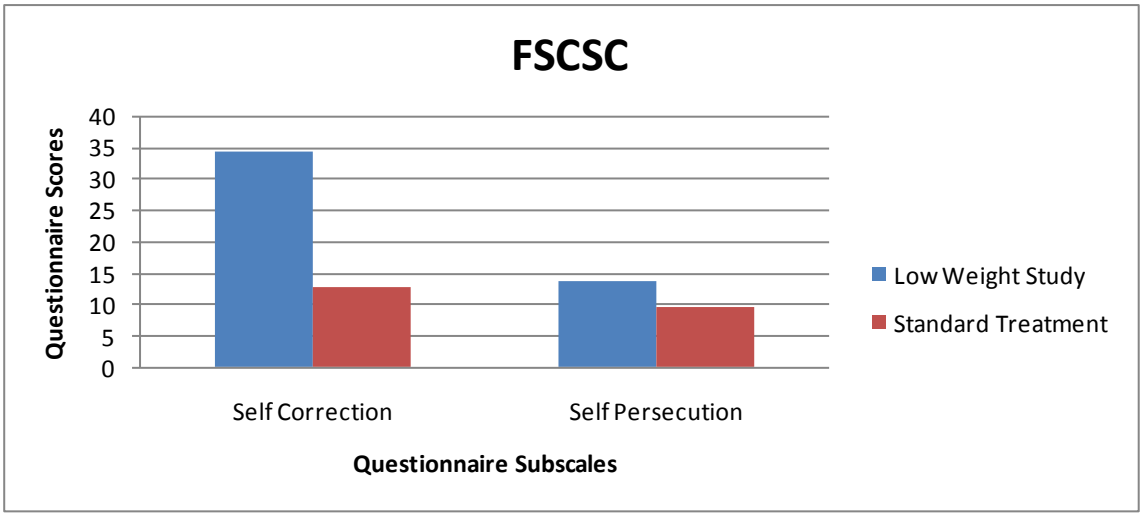
Figure 18: Histogram depicting mean scores for CORE at end of treatment for both groups.




The CORE subscales show significant improvements in the low weight participants on three of the five subscales, with standard treatment showing more improvement in wellbeing and problems.

FSCSC:

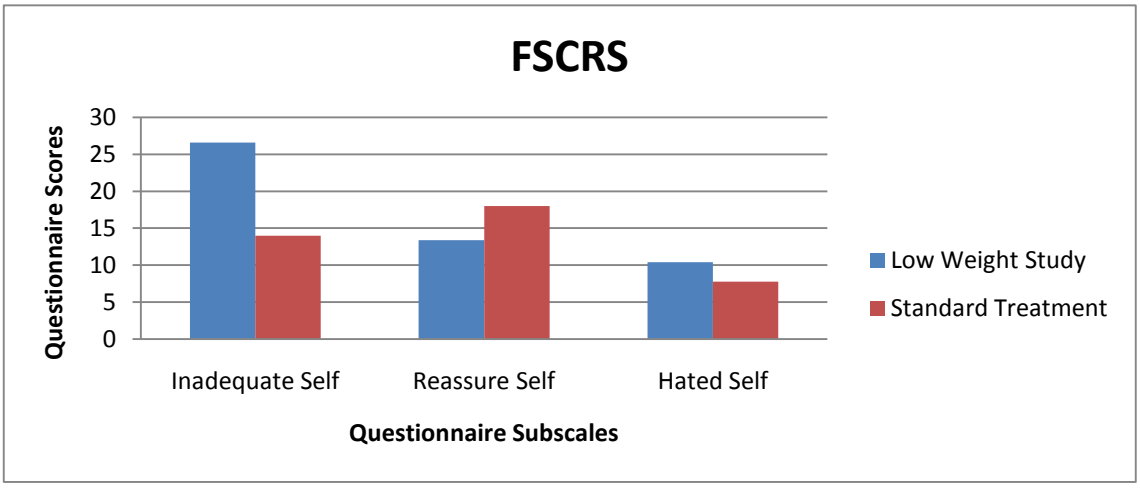
Figure 19: Histogram depicting mean scores for FSCSC at end of treatment for both groups.




Both subscales on the FSCSC showed greater reduction on both subscales for standard treatment.

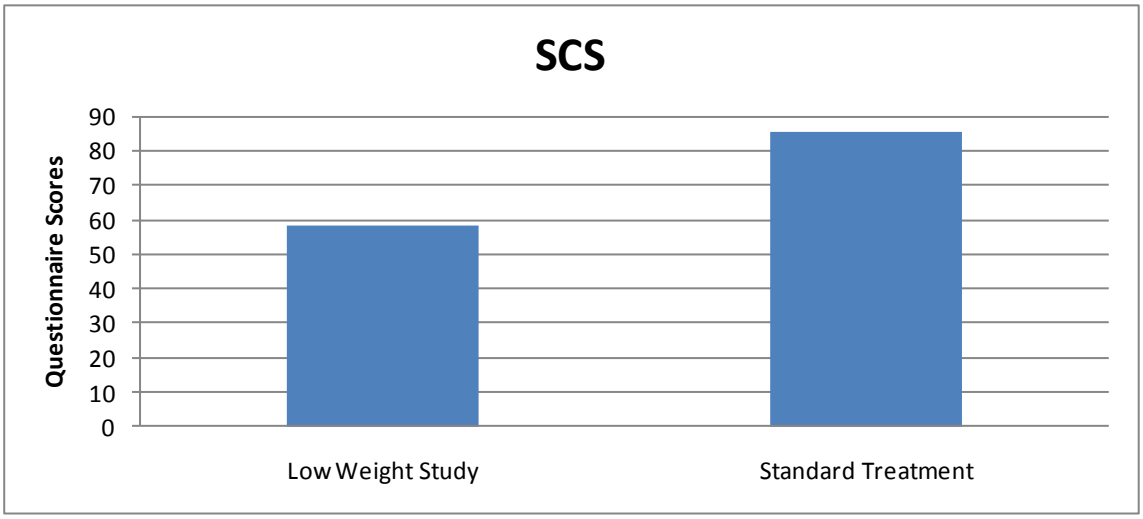
FSCRS:

Figure 20: Histogram depicting mean scores for FSCRS at end of treatment for both groups.




The FSCRS showed greater improvement for the reassure self subscale for the low weight participants but less so for inadequate self and hated self.

Figure 21: Histogram depicting mean scores for SCS at end of treatment for both groups.




The low weight participants showed lower levels of compassion, with those completing standard treatment achieving greater improvement by end of treatment.

**6.7 – Summary of results:**

The results of the study are mixed, consisting of very promising results that show how feasible the study has been and would recommend future research on a larger

scale, but also results that are worrying and show the opposite of what was expected and go against the brief qualitative findings.

Overall impact of low weight treatment:

Significant results were predominantly shown with BMI, the EDE-Q and the SEDS scales which focuses on core eating disorder psychopathology and behaviours, although slight significances were shown on other subscales.

The compassion subscale showed slight significance, however the scales focused on self-criticism which were expected to be significant in their findings were not. This will require further exploration should the follow-up scores present similar findings. It could be explained through the programme not working as effectively as necessary, or could indicate an issue with the types of self report measures chosen for the study or the participant's ability to be able to accurately assess their own internal experiences.

Comparison with standard treatment:

Overall standard treatment showed little significance in findings by treatment 20, aside from BMI and compassion. This is interesting and may be due to the particular sample used. The outcome data previously analysed by Gale et al (2012), identified that the programme was effective apart from BMI, which this study has gone against, this may be due to the small sample size and loss of power. The group comparisons would need to be completed on larger scale to account for these findings. The self-compassion finding is promising and will require further analysis at follow up, which unfortunately was not possible for this dissertation.

When looking at comparisons at end of treatment, the results were once again mixed and will require further exploration at follow-up or to be repeated on a larger scale.

# CHAPTER 7

# 7. DISCUSSION

## 7.1 – Summary of the study

This study aimed to evaluate the effectiveness of an extended group therapy programme using CFT for individuals with a low weight eating disorder, with a view to proving the principal that 47 sessions is more effective than 27 sessions with regard to weight restoration and improving core eating disorder psychopathology.

## 7.2 – Findings

When looking at the core aims of the study, some aspects were proved with all participants' weight restoring to a healthier level, and with a significant reduction in core eating disorder pathology across certain self report measures. No significance was found on the other self report measures despite stated improvements by the participants. This may be due to the way the measures are designed and scored or due to the small sample size. More time should be spent in incorporating a compassion diary (Mayhew & Gilbert, 2008) into research, which unfortunately this study was unable to complete, this would allow for more focus on the effects of CFT in the way individuals apply it. This could be used in conjunction with the SCS questionnaire and may provide more meaningful results.

The study had a relatively low attrition rate and a high percentage of completers despite a small sample size. The sample size was small due to issues of recruitment in the early phase of study set up as outlined in the participants' section of chapter 3. Further low weight groups need to be completed to enable more power in statistical analysis.

The reported improvements in BMI were good overall, however none of the participants reached a BMI of 20, with participants stating that they felt that a longer period of time would be beneficial to fully weight restore.

The study produced good outcomes on the EDE-Q, the SEDS and self-compassion.

**7.3 – Conclusions**

The findings corroborate that this study as a pilot study was feasible, and showed some interesting results which should lead to future research.

Research Question 1:

The research programme proved effective on eating disorder psychopathology (EDE-Q; SEDS) and overall functioning and wellbeing (CORE). This identifies that the treatment intervention was helpful to the participants, however, only partly succeeded in its intended aims and objectives. But with a noticed increase in bulimic tendencies, as reported by the SEDS scale, this could represent a self perceived move towards bulimic cognitions and behaviours due to the reactivation of the hunger system. This requires further investigation during the follow up phase of treatment and highlights the limitation of incomplete data collection from session 40 onwards.

With regard to overall wellbeing the results are promising with the CORE representing marked positive changes and improvements. Qualitative findings supported this with participants self reporting improved quality of life and particularly improved social functioning.

Compassion was the focus of the study, with one of the overall aims being to increase levels of self-compassion versus self-criticism. A small improvement was found but to a lesser degree than that expected. These findings may have been more robust had the self-compassion diary (Mayhew & Gilbert, 2008) been successfully implemented as originally planned. Qualitatively participants voiced a significant increase in their feelings of self-compassion and a reduction in self-criticism, however the quantitative data was only able to partially support this.

Research Question 2:

The ability to adequately analyse this question was compromised due to the lack of follow up data available as the most effective comparisons could have been drawn from data collected 3 months after treatment end. This was not possible with the

only comparisons being made at session 20, and showed little as limited improvements were expected for the research group at this time point in treatment.

The remaining comparisons were drawn from analysis of mean scores at treatment end for both the research group and standard treatment, with mixed results being achieved.

The BMI scores for the research group had significantly improved by the end of treatment as predicted, however the BMI results for standard treatment were also significant which was not expected. This is likely to be due to the fact that many low weight patients who embark on standard treatment also receive individual support to weight restore due to the co-morbid physical health risks. This would therefore limit the results as each individual may have received individualised care packages alongside standard treatment, such as additional individual therapy sessions, meal planning support and dietetic input.

### 7.4 – Clinical implications of the current study

The current study aimed to provide an alternative form of treatment for individuals with a low weight eating disorder as, often patients would require inpatient admission and be away from their family and friends for lengthy periods of time (approximately 8 months to 2 years). The study has shown some promising results which if replicated on a larger scale may prove that this is an effective alternative treatment pathway. The study cost significantly less than an inpatient stay, which must be taken into account when commissioning of services is focused upon.

During the qualitative arm of the study participants provided positive feedback regarding their time on the treatment programme which unfortunately wasn't always supported by quantitative findings, however must not be dismissed. The participant viewpoint is essential to reflect their journey and may be used to shape further research within this area.

### 7.5 – Strengths of the current study

The study provided intense treatment for low weight individuals for a lengthy period of time, allowing them to be in a safe environment among other individuals who understood the debilitating nature of the illness they were experiencing.

This study demonstrates that it is feasible to carry out a study of this kind. Despite the high level of physical and psychological risk factors all six of the patients remained in treatment with no need for hospital admission or medical attention throughout. This should go some way in providing reassurance that working with this population in the community is possible and allow for replication or similar studies being carried out.

The study supports models which argue for 'a transdiagnostic approach' to be taken when assessing and treating eating disorders. The current study included patients with Anorexia Nervosa and EDNOS and has identified large overlaps in symptom presentation across diagnostic groups.

The study has highlighted potentially different clinically relevant areas to focus upon, such as the differences in self-compassion in the low weight population and those at healthy weight and the difference in commencement baseline scores. These areas may help inform theoretical understandings of aetiological and maintenance pathways for specific eating disorder presentations.

### 7.6 – Limitations of the current study

#### 7.6.1 Sample of Participants

One of the most important limitations of the current research relates to the study's sample size, with only six participants completing the treatment programme, this made data analysis more difficult and if known at inception then the study design may have been varied with perhaps a case series design being opted for. The participants were all female and it would have been interesting to have seen the impact this programme would have had on a male suffering from an eating disorder at low weight.

During the recruitment phase a male patient had been approached for inclusion into the study, however due to other circumstances he was unable to attend and opted into standard treatment. This was unfortunate but understandable, but had he have participated it would of provided an insight into whether the study was feasible and acceptable to a male. To provide valid outcomes a larger sample of male sufferers needs to be researched, however at this stage there is no reason to suggest that treatment would not have been effective. Male sufferers currently sit in standard treatment, with outcomes being as effective as female sufferers.

Data was also collected on duration of illness at assessment, with the differences in the sample being immediately obvious. One of the patients had only experienced symptoms for one year, compared with one patient experiencing a twenty year history. This was not reflected in the overall findings as group data was looked at in its entirety, however, a case series would have shown overall differences in findings based on length of illness.

The process of matching is of interest as time was spent trying to 'match' a sample of patients who completed standard treatment in order to answer the second research question. Variables considered diagnosis, BMI and completion of data with the process being completed by a voluntary assistant in order to prevent bias upon the sample. A way of achieving greater validity would have been to obtain a larger sample of patients to increase strength of the sample or to have been in the position to complete a randomised control trial. It has to be recognised that to match a sample completely is impossible when completing research involving human beings as no two individuals are the same.

### 7.6.2 Measures

The EDE-Q is a self report version of the well established investigator based interview, the eating disorders examination (EDE; Cooper & Fairburn, 1987; Fairburn & Cooper, 1993). The measure was designed to assess the specific psychopathology of eating disorders and is useful in determining the effects of treatment. For the purpose of this study it was the only self report measure to have clinically significant findings across all four subscales.

The CORE aims to measure global distress and correlates highly with other self report measures, most notably the Beck Anxiety Inventory (BAI). The measure is suitable for use as an initial screening tool and for assessing response to psychological therapy across a wide range of service types. Evans et al (2000) identify the CORE is sensitive to change and has high internal and test-retest reliability.

The ISS has been criticised as primarily offering a measure of global (negative) self-esteem and self-criticism, rather than specific affective or behavioural aspects. The ISS is also highly correlated with measures of depression in student samples (Allen et al, 1994). Therefore the results achieved for this study could be a construct of this.

The OAS measures perceptions of how others behave and see the self. In a non-clinical sample (Goss et al, 1994) this scale measures inferiority and emptiness, however in clinical samples this is not so clear.

The SEDS was developed based on the experiences of 40 eating disorder clinicians and what they believed to be significant eating disorder cognitions and behaviours, rather than on clinical cut offs for diagnostic inclusion / exclusion.

The FSCRS and the FSCS consists of many items which were derived from clinical work with individuals suffering from depression. The author (Gilbert) of the measures had noted some of the typical thoughts that this sample population held regarding their own experiences of self-criticisms and ability to self-reassure. Gilbert identified that both of these self report measures were not fully comprehensive.

With regard to the SCS, Dr Kristin Neff who developed the measure, has recently advised that the scale should be analysed as a unitary measure as opposed to the binary method previously used in research. The binary method had previously shown good construct reliability, however, current unpublished data is questioning the validity of the measure being used in the unitary way. More research needs to be completed to ensure this measure is accurately used. Due to the small sample size it is likely that the slight significance achieved would be unaffected with either scoring method.

The volume of measures used need to be highlighted, as it is possible that participants may have felt over burdened by the fact that so many measures were used at so many data collection points. Participants may have taken less time in the completion of them towards the end, and this may have impacted on the validity of answers being achieved. Participants verbally stated that 'there were too many' on more than one occasion during the research process. This should be addressed if the research is to be replicated. All the measures focus on different symptoms, so rather then reduce the number of measures used, the frequency of administration could be reduced, with a main focus being at treatment start and end.

Previous research within the field of eating disorders utilises subscales within the aforementioned questionnaires. In regard to the SEDS this has been challenged on two occasions (Openshaw & Waller, 2004; Gamble et al, 2005), both resulting in stating that individual subscales lacked internal consistency, but overall consistency was good. Therefore caution should be used in its interpretation. Subscales were used as previous eating disorder research indicates this trend. The subscale usage of the EDE-Q, demonstrated high reliability of scores across the subscales (Kelly et al, 2012).

No harm came to the participants throughout the study, but the perception of binging as a symptom commencing during the initial phase as shown by the EDE-Q was apparent. At the point where appetite comes back online (an important first step in recovery) there is often the perception that individual's overeat. Even if consuming a normal portion of food, patients feel they are overeating or binging as they have often been in a restrictive phase of eating for a long period of time. Whilst this can be distressing initially, patients quickly realise that appetite regulates and through the process of regular eating, the tendency to feel they are overeating lessens. The question is how valid is the EDE-Q at this point as it asks questions about self perception of overeating and if this feels uncontrolled. Even if patients subjectively feel this is happening, they may not be binges as defined within the diagnostic criteria of Bulimia Nervosa.

BMI was used to establish physical improvements throughout the study, however it is important to note that BMI as a tool could have potential limitations and cause other physical health markers of wellbeing to be overlooked. BMI was used as it is the current industry standard.

### 7.6.3 Statistical Analyses

The distribution of the data was normally distributed meaning parametric tests were applied, however due to the small sample size there was not sufficient power to allow statistically and clinically robust conclusions to be drawn. Due to this some of the analyses were more exploratory in nature and the significant results should be treated with caution and need to be replicated in a larger population.

As is also common with research involving human beings there is missing data. This was counteracted where possible by using mean scores for scales if one or two items were missing., however, for those who had a whole set of questionnaire scales missing their data could not be included, hence the data analysis being completed with just five of the participants data, despite six having completed treatment. The level of attendance also varied, which undoubtedly impacted on findings as certain individuals attended more frequently. The following table shows the level of attendance:

Table 18: Table of attendance

| Patient | Sessions attended out of 47 |
|---|---|
| 1 | 43 |
| 2 | 32 |
| 3 | 45 |
| 4 | 44 |
| 5 | 33 |
| 6 | 43 |

If a case series design had been adopted then each individual participant would have been analysed in terms of outcome across all measures, however, due to the

restrictions of this dissertation this was not possible. The above table shows a significant difference in attendance with two of the participants attending less than 40 sessions. The data from these two participants could have significantly affected the overall data analysis.

Qualitative data:

The patient voice was heard and described in Chapter 5, however full analysis did not take place for reasons already stated. The participants did not talk about the treatment as research throughout, which is important to note as a conclusion., It suggests that participants were able to look beyond the fact that this was a piece of research, and also leading the participants to not use the term 'research' at any point during treatment or during the clinical interview.

It is of interest that different results were achieved from the qualitative and quantitative aspects of the study, with the patient voice and experience proving more positive than the numerical quantitative findings. As previously explored, there may have been 'questionnaire burnout' but it may also have been due to the fact that it remains difficult to fully capture the patient experience in qualitative or quantitative research alone.

### 7.6.4 Methodological Issues

There are a number of other limitations for the current research, including the fact that one of the main therapists was principal investigator for the study. This was taken into consideration particularly when completing the structured interview, with another clinician leading the interview so as not to introduce bias. This dual role was challenging and presented issues such as the non completion of self report measures and possible bias during recruitment. When self report measures were not completed, and had to be requested, by repeatedly requesting them there was a risk that therapeutic alliance could be affected, also the patients recruited were assessed by the two facilitators running the group therapy. Ethically this may have led to participants feeling an overarching need to please the researcher, placing them in a vulnerable position and placing the clinician / researcher in a complex position as

regard to group dynamics. These difficulties and effects of having a dual role were constant throughout the programme and if the study were to be replicated then this would need to be taken into account, by keeping the researcher separate from the therapeutic element of the programme. However, it is important to note that this dual role is not uncommon particularly within psychological research and is an ethical dilemma often faced by the lead researcher.

The programme was devised to provide a longer period of time to enable weight restoration and reduction of core eating disorder psychopathology. Both the length of the programme and the content will then have impacted on patient outcomes. Many of the improvements took place between session 20 and session 40 but it is difficult to define whether this was purely down to length or new content of programme. Participant perspective indicated it was length of programme, but this needs to be taken with caution and is not a validated finding. Greater emphasis on this point in the qualitative interview may have been useful and if the study were to be replicated then this would need to be considered.

CFT is still very new as a therapeutic approach with a limited pool of clinicians and researchers focusing on it, therefore bias may be immediately introduced from the author of this dissertation and point of view, and also the other authors cited from the relevant literature.

**7.7 – Suggestions for future research**

This study has provided information regarding the effects of CFT in an extended group therapy programme for individuals at low weight with an eating disorder. Whilst the results are promising, due to the limitations of this research it is crucial that further research take place. It would be useful for this study to be repeated to allow for further data collection with an increased sample size, this would provide increased power with a view to supporting the current findings within this pilot study.

The current study could also be repeated in the form of a multi-site randomised control trial which would allow for a strengthened model of comparison between the extended treatment programme and treatment as usual.

### 7.8 – Summary of conclusions

This study investigated the impact of an extended form of group therapy for the low weight eating disorder population. Whilst some of the findings were promising, further research needs to be completed to seek more clinically sound results if any change to clinical guidelines were to be instigated.

This is an extremely vulnerable population, with patients of this type of eating disorder presenting with high levels of physical and psychological risk factors and symptoms. This study has shown it is possible to treat this sample within the community, assuming a clinically structured and robust treatment programme envelopes them.

More qualitative research would have been useful, particularly the original plan of completing a semi-structured interview rather than a structured one. This would have allowed for more valid information to have been gathered and to establish more in regard to key findings without having to heavily rely on the quantitative information due to potential issues with self reporting information in questionnaire format.

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# APPENDICES

- **Appendix 1:** Summary of literature searches performed
- **Appendix 2:** Literature Review Tables
- **Appendix 3:** Psychometric questionnaires / Self report measures
- **Appendix 4:** Participant Information Sheet
- **Appendix 5:** Consent Forms for inclusion into study and clinical interview
- **Appendix 6:** Self Compassion Diary
- **Appendix 7:** Gantt Chart
- **Appendix 8:** Qualitative Interview Schedule
- **Appendix 9:** Subscale computes (variable transformations)

## **Appendix 1:** Summary of Literature Searches performed

**Databases searched:** *EBSCOhost* – A collection of leading research databases.

*Medline* – Comprehensive biomedical database of more than 3,9000 healthcare journals.

*Pubmed* – Comprises more than 21 million citations for biomedical literature.

*NHS Evidence* – A service that enables access to clinical and non clinical evidence.

*PsychInfo* – Comprehensive international database for psychology and other related disciplines.

**Keywords used:** Compassion, Compassion Focused Therapy, Self Compassion, Compassionate Mind Training and Compassion with eating disorders.

**Limits:**
Peer reviewed journals
Published between 2000-present
In English language
Full text

**Appendix 2:** Literature Review Tables

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Zabelina & Robinson (2010). | -Measuring effects of self-compassion on creative originality among self-judgemental individuals. | -Randomised Controlled Trial (RCT) | -N= 86 (55 male & 31 female).<br>-Undergraduate psychology students required to participate in a number of research studies for course credit. | -Requested online to write about a negative event that had made them feel bad about themselves for 5 minutes.<br>-Participants were then randomly assigned to either a control condition or one designed to induce a self compassionate mind set.<br>-Control group continued to write about negative event.<br>-Those assigned to self-compassion group received three additional prompts designed to encourage a self-compassionate orientation. | -Abbreviated Torrence Test for Adults (ATTA), Goff & Torrence (2002).<br>-Self Judgement Scale (Neff, 2003).<br>-Mood likert scale. | -Reaffirmed the value of a self-compassionate mindset for those generally prone to self criticism. | -A paper exploring the link between compassion and originality.<br>-Variables examined were predictive of creative originality but not its fluency. | -Very confusing methodology.<br>-Limited information regarding intervention used.<br>-No information provided as to how sample was randomised, which may have compromised the validity of the study. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 2. | Mayhew & Gilbert (2008) | To explore the understanding, acceptance and value of compassionate mind training (CMT) with psychotic voice hearers. | Case series design. | -Total N = 7 (6 men and 1 female).<br>-Completers = 3 (all male).<br>-Ages between 23 and 64 years.<br>-Outpatients (being seen by community mental health teams)<br>-Mulitiple exclusion criteria.<br>-DSM-1V diagnosis met (all diagnoses the same). | -Participants received 1:1 CMT over 12 one hour sessions.<br>-Therapy carried out by one female psychologist - (author, Mayhew).<br>-Same therapist for all participants.<br>-Clinical supervision provided by male psychologist for all participants (author, Gilbert). | -Measures taken before and after CMT (six questionnaires at each data collection point).<br>-Weekly Compassion diary throughout.<br>-Measures taken again at six months follow-up.<br>-Participants continued to receive their individual mental health support in the community.<br>-<u>Measures:</u><br>-BAVQ<br>-Forms of Criticism/ Self Attacking & Self-Reassuring Scale<br>-Functions of Self-Criticism / Attacking and Self-Reassuring Scale<br>-SCL-90<br>-Voice Rank Scale<br>-Self Compassion Scale.<br>-Repeated measures presented in histogram format. | -Decrease in PST for all participants as measured by the SCL-90 (particularly decreases in their scores for OCD, IPS, Depression, Anxiety, Paranoia and Psychoticism.<br>-All participants' BAVQ total scores were reduced.<br>-All participants' voices became less malevolent.<br>-All participants' voices became less persecuting.<br>-2 participants heard more reassuring voices.<br>-The third participant heard a high level of reassuring voices.<br>-All participants had reduction in their Inadequate-Self scores (Forms of Criticism Scale). | -Supported premise that CMT is beneficial for individuals hearing malevolent voices.<br>-CMT transformed participants hostile voices, transforming them into becoming more reassuring, less persecutory and less malevolent. | -Need for more frequent administration of self compassion scale, to accurately measure growing development of compassion.<br>-Only three participants completed the study. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 3. | Gilbert & Procter (2006). | To explore patient acceptability, understanding, abilities to utilize and practice compassion focused processes and the effectiveness of CMT from an uncontrolled trial. | Pilot Study. | -Patients with major/ severe long-term and complex difficulties<br>-Day patients within the same mental health trust<br>-Had to be engaged in therapy and not due for discharge within the next 3 months<br>-Needed clear problems with shame, self-criticism and self-devaluation<br>-Total N= 9 (4 males & 5 females)<br>-Completers = 6 (2 males & 4 females) | -12 weekly two hour CMT sessions<br>-CMT delivered by male psychologist (author)<br>-Group Therapy | <u>Measures:</u><br>-HADS<br>-Weekly Diary measuring Self-Attacking and Self-Soothing<br>-FSCS<br>-FSCRS<br>-Social Rank Variables - OAS<br>-Social Comparison Scale<br>-SBS<br>-Repeated measures – Wilcoxon signed-rank test. | -Significant reduction in both HADS, Anxiety and Depression scales.<br>-Many participants found their self-critical thoughts became less frequent, less powerful and less intrusive<br>-There was a significant drop in self-persecution but not self-correction.<br>-Major reduction of feelings of inferiority, with social comparison scores moving into a non-clinical range. | -Descriptive writing style utilised.<br>-Provides concise information regarding model.<br>-Useful use of histograms to depict results. | -No formal diagnosis given to any participants.<br>-Pre-trial study therefore no control group in situ. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Gilbert & Irons (2004) | To develop a diary for monitoring self-attacking and self-soothing thoughts and images. | Pilot Study | -Total N = 9 (2 men and 7 women)<br>-All had a DSM diagnosis of depression and had suffered with this for more than 10 years.<br>-A number of participants had co-morbid difficulties such as social anxiety, agoraphobia, and OCD.<br>-Purposive sampling used from an existing self-help depression group.<br>-All were prescribed anti-depressant medication. | -Participants were asked to attend four 1 ½ hour evening sessions as a group.<br>-Sessions focused on the nature of self criticism, and how learning to be compassionate with the self, and focusing on compassionate imagery might help to counteract self-criticism.<br>-Three consecutive weekly sessions and a follow-up four weeks later. | -All participants completed the Hospital Anxiety and Depression Scale (HADS).<br>-Self-attacking and self-reassuring diary measure completed daily for 2 weeks and then weekly.<br>-An interval contingent format was chosen.<br>-Paired t-test was used. | -t-test revealed the small reduction in scores for self criticism was non-significant: mean score baseline = 42.35, (SD = 13.7) mean score post compassionate mind training = 37.46 (SD = 11.2) t(7) = 1.32, p = 22.<br>- Significant increase in the ease of generating these images and soothing oneself in a self-critical situation: mean score baseline = 15.57 (SD = 9.0), mean score post compassionate mind training = 21.27 (SD = 9.2); t(7) = 2.94, p =.02. | -Very strong sampling methodology with patients being stringently screened. | -Even though 9 people took part in the study, data was only complete from 8. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 5. | Pauley & McPherson (2010) | To explore the meaning and experiences of compassion and self-compassion for individuals with depression and anxiety. | IPA | -Total N = 10 (9 women and 1 male)<br>-6 had a DSM diagnosis of depression (3 of them also had a diagnosis of GAD)<br>-4 had a DSM diagnosis of a specific phobia | -Semi structured interview was developed by drawing on existing compassion and self-compassion literature.<br>-These components were then refined into specific questions and piloted with service users and colleagues.<br>-Feedback shaped the final interview.<br>-The interview used the areas outlined by Neff's (2003) definition of self compassion. | -Themes were developed using an iterative process consistent with an IPA methodology.<br>-Initial familiarization with the data from each transcript.<br>-An initial summary of themes was then refined<br>-Two processes were used to enhance the reliability of the analysis. | <u>Themes:</u><br>-(1) Compassion is a kind and active process<br>-(2) Compassion is about being kind towards people<br>-(3) Compassion requires action<br>-(4)Self compassion is meaningful and useful<br>-(5) Self-compassion feels meaningful for me<br>- (6) Self-compassion might help me with my depression / anxiety<br>-(7) Being self-compassionate is difficult<br>-(8) I'm not sure I can be self-compassionate<br>-(9) Negative impact of depression / anxiety on my ability to be self-compassionate. | -Good use of qualitative methods to explore self compassion.<br>-Questions based on existing self compassion research.<br>-Use of single diagnosis, disallowing co-morbidity. | -Need to use across other diagnostic groups.<br>-Recruited from existing clinical caseload.<br>-Doesn't identify who completed interviews. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 6. | Harman & Lee (2010). | -Suggestion that 'shame' might contribute to the creation / maintenance of ongoing current threat as it attacks an individual's psychological integrity. | -Quantitative Questionnaire design.<br>-Correlational design | -N= 49 (26 females & 23 males)<br>-Age range 21-56 years (mean age 38).<br>-Recruited from five outpatient services within the UK NHS.<br>-Inclusion were that participants were experiencing significant symptoms of PTSD. | -Patients were sent out an opt-in pack for the research study and were asked to complete a number of questionnaires. | -The PDS (Foa, 1995)<br>-The BDI (Beck, Rush, Shaw, & Emery, 1979)<br>-The Experience of Shame Scale (ESS; Andrews Qian, & Valentine, 2002)<br>-The Forms of Self-Criticizing / Attacking and Self-Reassuring Scale (FSCRS; Gilbert et al, 2004).<br>-The Functions of Self-Criticising / Attacking Scale (FSCS; Gilbert et al., 2004). | -Hypotheses of the study were largely supported.<br>-Shame was shown to have a significant positive correlation with self-criticism and a significant negative correlation with self-reassurance. | -Findings add further support to research looking at shame and PTSD | -Lag between dates of questionnaires being completed.<br>-Small sample size.<br>-Use of Cross-sectional design. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 7. | Neff (2003) | -Defines the construct of self compassion and describes the development of the self-compassion scale. | -Pilot testing of Items for the Self-Compassion Scale.<br>-Study 1: Quantitative, Questionnaire design (71 self compassion items previously generated in pilot testing).<br>-Study 2: To determine how self compassion constructs differs from the construct of self esteem. | -391 undergraduate students (166 men; 225 women; mean age 20.91 years; SD= 2.27)<br>-Randomly selected from an educational-psychology subject pool at a large southwestern university.<br>-Ethnic breakdown: 58% White, 21% Asian, 11% Hispanic, 4% Black, and 6% Other. | -Participants were administered the set of 71 self-compassion items.<br>-Participants were instructed to indicate how often they acted in the manner stated in each of the items on the scale of 1 (almost never) to 5 (almost always). | -Responses to items assessing the three components of self compassion were analysed separately using exploratory factor analysis (EFA).<br>-Final versions were then analysed using confirmatory factor analysis (CFA) assessing the goodness of fit model to the data. | -The Self Compassion Scale significantly predicted mental health outcomes.<br>-Women had significantly lower overall self-compassion scores than men.<br>-Women reported significantly higher levels of self-judgement, isolation and over-identification and significantly lower levels of mindfulness than men. | -Findings suggest that the Self Compassion Scale demonstrates good construct validity.<br>-Self compassion had a significant negative correlation with anxiety and depression, and a significant positive correlation with life satisfaction.<br>-Suggestion that self-compassion may be an adaptive process that increases psychological resiliency and well-being. | -Due to the paper incorporating three studies, it becomes quite difficult to interpret and read.<br>-The self-report scale will necessarily be limited in its ability to accurately assess individual levels of self-compassion. Due to many people not being aware enough of their own emotional experiences to realise the extent to which they lack self-compassion. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 8. | Neff & McGehee (2010) | The study examined self compassion among adolescents and included a sample of young adults as a comparison group. | -Unclear | -235 adolescents (48% male, 52% female; mean age = 15.2 years, range 14-17).<br>-287 young adults (43% male, 57% female; mean age = 21.1 years, range 19-24).<br>-Adolescents were from a private high school in a large southwestern city in the united states.<br>-The young adults were from a college in the same city.<br>-Socioeconomic backgrounds of both groups were similar (largely middle class).<br>-Ethnic composition – adolescents were 79% Caucasian, 7% Hispanic, 1% Asian, 13% mixed/other. Young adults were 68% Caucasian, 9% Hispanic, 17% Asian, 7% mixed/other. | -Participants were given 8 questionnaires (outlined in analysis) | -Participants were given the Self Compassion Scale (SCS; Neff, 2003)<br>-Beck Depression Inventory (BDI; Beck & Steer, 1987)<br>-Spielberger State-Trait Anxiety Inventory- Trait form (Spielberger, Gorsuch, & Lushene, 1970)<br>-The Social Connectedness Scale (Lee & Robbins, 1995)<br>-Maternal subscale of the Family Messages Measure (Stark, Schmidt, & Joiner, 1996)<br>-Index of Family Relations (Hudson, 1992)<br>-The Relationship Questionnaire (Bartholomew & Horowitz, 1991)<br>-The personal uniqueness subscale of the New Personal Fable Scale (Lapsley et al., 1989)<br><br>-t-test examining age group differences in study variables. | -Means, Standard Deviations and Cronbachs Alpha are reported for all measures.<br>-No significant difference in self compassion levels reported by adolescents and young adults.<br>-Was significant sex difference found among young adult sample, with females reporting less self-compassion than males.<br>-Hypotheses were supported. | -Self compassion scale was found to be reliable. | -Recruitment process.<br>-Study design and methodology unclear. |

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|---|---|---|---|---|---|---|---|---|---|
| 9. | Gilbert, McEwan, Mitra, Franks, Richter & Rockliff (2008) | -The study had five aims:<br>1-The study sought to develop a self-report scale focusing on the two types of positive affect regulation systems indicated by neuroscience.<br>2-Validation of scale against other self report scales.<br>3-To explore how different types of positive affect regulation systems relate to dimensions of attachment.<br>4-To explore positive affects in regard to people's relationship with themselves.<br>5-To explore positive affects in relation to the psychopathology variables of depression, anxiety and stress. | Quantitative Questionnaire study | -N=203 (38 males and 165 females).<br>-Undergraduate students from the university of Derby.<br>-Age range 18-56 (mean age 23.31). | -A set of six self-report measures were handed out at the end of lectures and informed consent gained.<br>-A second group of 180 students (31 males and 149 females) from another study was used to explore factor structure replication for the measure used in this study. | -Activation and Safe/ Content Affect Scale.<br>-The Comprehensive Affect and Personality Scale (COPAS).<br>-Adult Attachment Scale.<br>-Forms of Self-Criticism and Self-Reassuring Scale.<br>-Depression, Anxiety and Stress Scale. | -Factor structure generated three factors despite hypothesis proposing two. One factor associated with positive affect, a second related to relaxed positive affect and third, a factor related to safeness and contentment positive affect. | -Large sample size.<br>-Findings have implications for therapies, as safeness / contentment may be especially linked to well-being. | -Due to multiple aims of the study, it became confusing and difficult to read.<br>-Young student sample. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 10. | Gilbert, Baldwin, Irons, Baccus & Palmer (2006) | -The study used a self-imagery task to investigate trait self-criticism and trait self-reassurance in relation to the ease and clarity of generating self-critical and self-reassuring images, and the felt power and emotion of self-critical and self-reassuring imagery<br>-These were also explored in relation to depressive symptoms in students | Qua**nti**tative, Questionnaire design | -Total N= 197 undergraduate students (26 males & 171 females)<br>-McGill University in Montreal, Canada (n=50)<br>-University of Derby, UK (n=147)<br>-Ages ranged from 18-51 years an age(mean = 23.39)<br>-Participants were either volunteers, or received extra credit in an introductory psychology course for their participation | -Participants were run in groups in a classroom setting. They were given two envelopes marked '1' and '2' that contained questionnaires and answer sheets.<br>-Participants were first instructed to open the envelope marked '1' and complete the questionnaires.<br>-After completing the self-report questionnaires, the researcher advised participants that the research would involve two visualisation / imagery exercises.<br>-The participants then opened envelope '2' and completed the self-report questionnaires. | <u>Measures:</u><br>-Center for Epidemiologic Studies-Depression Scale (CES-D).<br>-The Forms of Self-Criticizing / Attacking & Self-Reassuring Scale (FSCRS).<br>-Social Comparison Scale.<br><br><u>Visualization Exercises:</u><br>-Self-Critical Visualization.<br>-Self-Reassuring Visualization.<br><br><u>Analysis:</u><br>-Correlations, Means and Standard Deviations of Trait Variables, Social Comparisons, and Depression.<br>-Correlation Coefficients between Self-Report Questionnaires and Self-Attacking / Critical Visualizations.<br>-AMOS.<br>-Chi-square.<br>-Correlation Coefficients between Self-Report Questionnaires and Self-Reassuring Visualizations. | -Data suggested that self-criticism is linked to complex self-evaluative scripts where the criticism can be experienced as powerful, angry, discouraging and not easily dismissed.<br>-Strong inverse correlation between feeling self-supportive and self-criticalness. | -Results were consistent.<br>-Strong inverse correlation between feeling self-supportive and self-criticalness.<br>-The degree of trait self-reassurance was inversely related to the power of a self-critical image and anger in the image. | -Quite confusing to read, possibly due to the nature of methodology interspersed with visualisation exercises. |

| STUDY ID | AUTHOR(S) & DATE | AIMS OF STUDY | DESIGN | SAMPLE/ PARTICIPANTS | TREATMENT/ INTERVENTION DETAILS | ANALYSIS/ MEASUREMENT | KEY RESULTS OF STUDY | AUTHOR'S INTERPRETATIONS/ CONCLUSIONS | WEAKNESSES/ DISCUSSION POINTS |
|---|---|---|---|---|---|---|---|---|---|
| 11. | Gilbert, Clarke, Hempel, Miles & Irons (2004) | The study developed two self-report scales to measure forms and functions of self-criticism and self-reassurance and explore their relationship to depression | Quantitative Questionnaire study | -Total N= 246 female psychology undergraduate students<br>-Mean age 27.7 years | -All participants completed a series of self-report scales, presented in the same order at the beginning of a lecture | Measures:<br>-Centre for epidemiological studies depression scale (CES-D)<br>-Levels of self-criticism scale (LOSC)<br>-Forms of self-criticizing /attacking and self-reassuring scale (FSCRS)<br>-Functions of self-criticizing / attacking scale (FSCS)<br><br>Analysis:<br>-Principle-components analysis with oblimin rotation was conducted<br>-Pearson product-moment correlation matrix | -Feeling inadequate could be separated from more hateful feelings for the self<br>- the perceived functions of self-criticising/ attacking could be separated into self correction and distinguished from desires to persecute or hurt the self for failing<br>-Forms of self-criticising / attacking mediate the functions; that is, the effects of self-correction and self-persecution on depression are mediated by the forms of self-hating vs. Self-reassuring | -Need for more research into the variations of self criticism and the mechanisms for developing self-reassurance.<br>-Emphasis on need for therapists understanding on forms and functions of self criticism. | -Shows interplay between quantitative and qualitative research.<br>-Participants from one social group (students). How would findings replicate with other sample populations? |

**Appendix 3:** Psychometric Questionnaires / Self Report Measures

## **Appendix 4:** Participant Information Sheet

Dear

**RESEARCH STUDY: A Pilot Study of Group Based Compassion Focused Therapy for Low Weight Eating Disorder Patients**

I am writing to invite you to take part in the above study which is being carried out at Coventry Eating Disorder Service. My name is Hannah Andrews and I am a Clinical Nurse Specialist in the field of eating disorders. I am very interested in the development of new treatment programmes specifically aimed at individuals with low weight Eating Disorders within the community setting. The purpose of this study is to ask patients with an eating disorder diagnosis at low weight (Body Mass Index 14.5 – 17.5) to take part in a 40 week group therapy programme which utilises Compassion Focused Therapy (CFT).

The following people are involved in this research study:

**-Hannah Andrews**

**Clinical Nurse Specialist**

**Coventry Eating Disorder Service / Comprehensive Local Research Network (CLRN)**

**Telephone number: 02476 521130**

**-Dr Ken Goss**

**Consultant Clinical Psychologist and Head of Coventry Eating Disorder Service**

**Telephone Number: 02476 521130**

**-Dr Steve Allan**

**Academic Tutor at the University of Leicester**

**Telephone Number: 0116 223 1648**

Please find enclosed a participant information sheet explaining the study in more detail and a consent form which needs to be signed if you agree to participate. Please ensure you read both the participant information sheet and the consent form in full before deciding whether or not you would like to take part in the study. I will also meet with you individually to discuss the study in more detail and answer any questions you may have before you make your decision.

If you decide you would like to take part or would like further information please contact me and we can arrange an appointment to discuss the study in more detail. Please bring your consent form with you to this meeting.

I would like to take this opportunity to thank you for reading this letter.

Yours sincerely

Hannah Andrews

Clinical Nurse Specialist

## Participant Information Sheet

### Study Title

A Pilot Study of Group Based Compassion Focused Therapy for Low Weight Eating Disorder Patients.

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research study is being done and what it would involve for you. If after reading this information sheet you have further questions you can contact the lead researcher on the contact number provided.

### What is the purpose of the study?

The purpose of the study is to evaluate the effectiveness of an extended (47 session) group based Compassion Focused Therapy (CFT) for participants with an eating disorder at low weight (Body Mass Index 14.5 – 17.5).

CFT is a relatively new development in Cognitive Behavioural interventions. It has been successfully applied to a number of patient populations including depression. Coventry Eating Disorder Service has pioneered the development of a specially adapted form of this treatment (CFT-E) for eating disordered patients developed by Dr Ken Goss. Clinical audit suggests that the group based 20 week version of this treatment is at least as successful as Cognitive Behavioural Therapy (CBT) for eating disorders. However those patients of lower weight (below body mass index of 17.5) did less well. CFT-ELW (Eating Disorders with low weight) was designed by Dr Goss to address the needs of this patient group. It offers a longer period of treatment and has greater emphasis on body image concerns. The aim is to address the greater difficulties that these patients face in normalising their weight and eating.

Compassion Focused Therapy (CFT) is a form of therapy which helps work on self criticism and self attacking thoughts, both of which are very common with individuals suffering from an eating disorder. CFT will help to enable patients to 'switch on' their self soothing thoughts and behaviours through use of taught skills, relaxation techniques and guided imagery. There will be a minimum of two clinicians leading the group and guiding patients through this form of therapy.

### Why have I been invited?

You have been invited to take part in the research study as you are a patient at Coventry Eating Disorder Service (CEDS) and have been diagnosed with an eating disorder. You are also of low weight with a Body Mass Index (BMI) of between 14.5 and 17.5. The results of this research could be used to develop a specific form of therapy for low weight eating disordered patients and could increase treatment guidelines for this patient population.

You will receive an extended 47 session group therapy treatment programme specifically tailored to your diagnostic needs.

==========

**Do I have to take part?**

You do not have to take part in this treatment study and are free to withdraw at any time. This will not affect your rights to treatment from Coventry Eating Disorder Service (CEDS). If we feel you are suitable for group therapy but you decide not to take part in this study then you will be offered the 20 week programme that is currently being run within our service.

**What will happen to me if I take part?**

If you decide to take part then you will be invited to an appointment with Hannah Andrews (Clinical Nurse Specialist) who will explain the study to you in more detail. If you decide to take part following this appointment you will then be placed on our waiting list until the group programme commences (approximately 6-10 weeks). The group programme will then consist of 47 treatment sessions over a period of 42 weeks.

**What will I have to do?**

You will be required to attend 47 treatment sessions over 42 weeks. Each session will last 2.5 hours. Alongside the group you will be asked to complete homework tasks and your physical wellbeing will also be monitored. You will also be asked to complete a questionnaire pack on 8 occasions during the course of your treatment and will have 6 individual clinical review appointments.

**What are the potential disadvantages and risks to taking part?**

The biggest disadvantage to taking part in this study is the extended length of time in treatment (40 weeks). However clinical audit and previous patient feedback has indicated that the 20 week programme is insufficient time to weight restore or to make significant improvements in their eating disorder.

Currently low weight patients who struggle with outpatient treatment are offered inpatient or day patient care. The current study offers a less intrusive alternative to this level of care.

You may become psychologically distressed during the course of the study; however you will be closely monitored by the staff at Coventry Eating Disorder Service. The staff team includes:

- Psychiatrist
- Clinical Psychologists
- Clinical Nurse Specialist
- GP
- Trainee Psychologists

Due to being low weight you may become medically unwell during the course of the study. Due to this you will have your weight monitored weekly and may also require other investigations on a regular basis such as blood monitoring. If you do become physically unwell or feel you need a higher level of support then hospital admission may be necessary. This would be discussed fully with you and all options considered. If you are admitted to hospital then you would be removed from the study, however this won't affect your care or access to treatment in any way.

**What are the potential benefits of taking part?**

There is currently no recommended outpatient psychological treatment for low weight eating disorders and as such most patients are offered hospital admission or day patient care. It is hoped that this group therapy programme will offer you the chance to remain in the community whilst receiving treatment to aid in your recovery.

**Will my taking part in the study be kept confidential?**

You will be involved in a group therapy programme therefore the other participants will be aware of your involvement as you will be of theirs. All other data including questionnaire results and individual appointments will be confidential. All data will be kept in your file in a locked filing cabinet at CEDS. The only people who will have access to your file will be your care team at CEDS. The collected data will be kept on a password protected computer at CEDS and a memory stick which will be kept in a locked cabinet at CEDS. There will be no personal information on the computer or memory stick as each participant will be assigned a number. If you wish for your GP to be informed of your participation then we can do this. There will be no identifiable information in any publications of this research. The data in your file will be kept for 7 years, in keeping with NHS procedure.

**What if there is a problem?**

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. If you remain unhappy and wish to complain formally you can do this following the NHS complaints procedure.

**What will happen to the results of the research study?**

The research study will be written up and submitted for journal publication. The first 12 months of data will also be used as part of a Masters Degree in research by Hannah Andrews (Clinical Nurse Specialist). The 47 session treatment programme will also be written up as a clinical manual with a hope of it shaping future guidelines for the treatment of low weight eating disorder patients.

**Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by Staffordshire Research Ethics Committee and Coventry and Warwickshire Partnership Trust.

**Contact for further information:**

If you require any further information before deciding whether to participate in this study please contact **Hannah Andrews (Clinical Nurse Specialist) on 02476 521130.**

## **Appendix 5:** Consent Forms

**CONSENT FORM**

**Title of Research:**

A Pilot Study of Group Based Compassion Focused Therapy for Low Weight Eating Disorder Patients

**Lead Researcher:** Hannah Andrews – Clinical Nurse Specialist

**Please initial box**

**1.** I confirm that I have read and understood the information sheet Dated 22/10/10(Version 3) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

**2.** I have had the opportunity to meet with Hannah Andrews (Clinical Nurse Specialist), who has explained the study in more detail. ☐

**3.** I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that I may then be invited to discuss alternative treatment options. ☐

**4.** I understand that the information I provide will be anonymous in any report or publication. ☐

**5.** I give permission to the research team in the above study to have access to my records. I also understand that my notes and data collected during the study may be looked at by individuals from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research, I give permission for these individuals to have access to my records. ☐

**6.** I give permission for my GP to be advised of my involvement in this study. ☐

**7.** I agree to take part in this study. ☐

**8.** I agree to be contacted regarding taking part in the next stage of this study. ☐

| _____ | _____ | _____ |
|---|---|---|
| **Name of Participant** | **Date** | **Signature** |

| _____ | _____ | _____ |
|---|---|---|
| **Witnessed by (Name)** | **Date** | **Signature** |

**CONSENT FORM FOR CLINICAL INTERVIEW**

**Title of Research:**

A Pilot Study of Group Based Compassion Focused Therapy for Low Weight Eating Disorder Patients

**Lead Researcher:** Hannah Andrews – Clinical Nurse Specialist

**1.** I understand that as part of my treatment in the above study I will take part in a clinical interview. ☐

**2.** I have had the chance for this process to be explained to me and have been given the opportunity to ask any questions. ☐

**3.** I have thought about this process and agree / disagree to the following:

a) I agree for direct quotations to be used. ☐

b) I wish to see any quotations before they are used. ☐

c) I do not agree for any quotations to be used. ☐

**4.** I understand that the information I provide will be anonymous in any report or publication. ☐

_____ _____ _____

**Name of Participant** **Date** **Signature**

_____ _____ _____

**Witnessed by (Name)** **Date** **Signature**

**Appendix 6:** Self Compassion Diary

**Appendix 7:** Gantt chart

**Appendix 8:** Structured Interview Schedule

## Compassion Focused Therapy for Low Weight Eating Disorders

## Structured Interview

- **= Prompts for clinician conducting interview.**

1. **Was the treatment you received acceptable?**
   **(What made it acceptable, frequency, intensity, length of treatment)**

2. **Was there anything unacceptable about the treatment you received?**
   **(What made it unacceptable, frequency, intensity, length of treatment)**

3. **What was most helpful?**

4. **What was unhelpful?**
   **(If unable to identify anything, prompt for what was most and least helpful)**

5. **Is there anything you would have preferred to have done within the treatment programme?**

6. **Is there anything you would have preferred not to have done within the treatment programme?**

7. **What were the most difficult aspects of treatment?**
   **(Was it helpful or not?)**

8. **What were the least difficult aspects of treatment?**
   **(Was it helpful or not?)**

9. **What was your overall experience of the group?**
   **(Positives & Negatives)**

10. **Did the treatment programme help?**
    **(What with and why?)**

11. **Did the programme make things worse?**
    **(What with and why?)**

12. **Which specific elements of the programme were useful and how often do you use them?**
    - **Meal planning**
    - **Distress management**
    - **Soothing Rhythm Breathing**
    - **Safe place**
    - **Compassionate Image**
    - **Compassionate letter writing**
    - **Compassionate behaviours**

13. **Which of the eating disorder symptoms has been helped by the programme?**
    - **Shame**
    - **Self- Compassion vs Self- Criticism**
    - **Safety Behaviours (eg restriction, purging etc)**

- **Social Functioning**

14. **Did you find the process of formulation useful?**
    **(What aspects of it?)**

15. **Did you find the three systems model useful (i.e.Threat, Drive & Soothing)?**
    **(What aspects of it?)**

16. **What kept you coming to the treatment programme?**

17. **What would you add or change for the next version of the treatment programme?**

**Appendix 9:** Subscale computes (variable transformations)

**CORE:**

*Time 1 Core*

Wellbeing: COMPUTE:

corew1 = mean.3(acore4,acore14,acore17,acore31) .

EXECUTE .

Problems: COMPUTE:

corep1=mean.9(acore2,acore5,acore8,acore11,acore13,acore15,acore18,acore20,acore23,acore27,acore28,acore30).

EXECUTE .

Functioning: COMPUTE:

coref1=mean.9(acore1,acore3,acore7,acore10,acore12,acore19,acore21,acore25,acore26,acore29,acore32,acore33) .

EXECUTE .

Risk: COMPUTE:

corer1 = mean.5(acore6,acore9,acore16,acore22,acore24,acore34) .

EXECUTE .

Total: COMPUTE:

coret1 = mean.26(acore1 to acore34).

EXECUTE .

**EDE-Q:**

*Time 1 EDEQ*

Restraint: COMPUTE:

eder1 = mean.3(aede1,aede2,aede3,aede4,aede5) .

EXECUTE .

Eating Concern: COMPUTE:

edeec1 = mean.4(aede6,aede7,aede9,aede15,aede34) .

EXECUTE .

Shape Concern: COMPUTE:

edesc1 = mean.6(aede10,aede11,aede12,aede13,aede30,aede33,aede35,aede36) .

EXECUTE .

Weight Concern: COMPUTE:

edewc1 = mean.4(aede11,aede14,aede29,aede31,aede32) .

EXECUTE .

**SEDS:**

*Time 1 Stirling*

Assertiveness: COMPUTE:

sta1 = ast1 + ast9 + ast17 + ast25 + ast33 + ast41 + ast49 + ast57 + ast65 + ast73 .

EXECUTE .

Self Esteem: COMPUTE:

stse1 = ast2 + ast10 + ast18 + ast26 + ast34 + ast42 + ast50 + ast58 + ast66 + ast74 .

EXECUTE .

Self Directed Hostility: COMPUTE:

stsdh1 = ast3 + ast11 + ast19 + ast27 + ast35 + ast43 + ast51 + ast59 + ast67+ast75.

EXECUTE .

Perceived External Control: COMPUTE:

stpec1 = ast4 + ast12 + ast20 + ast28 + ast36 + ast44 + ast52 + ast60 + ast68 + ast76 .

EXECUTE .

Anorexic Dietary Cognitions: COMPUTE:

stadc1 = ast5 + ast13 + ast21 + ast29 + ast37 + ast45 + ast53 + ast61 + ast69 + ast77 .

EXECUTE .

Anorexic Dietary Behaviours: COMPUTE:

stadb1 = ast6 + ast14 + ast22 + ast30 + ast38 + ast46 + ast54 + ast62 + ast70 + ast78 .

EXECUTE .

Bulimic Dietary Cognitions: COMPUTE:

stbdc1 = ast7 + ast15 + ast23 +  ast31 + ast39 + ast47 + ast55 + ast63 + ast71 + ast79 .

EXECUTE .

Bulimic Dietary Behaviours: COMPUTE:

stbdb1 = ast8 + ast16 + ast24 + ast32 + ast40 + ast48 + ast56 + ast64 + ast72 + ast80 .

EXECUTE .

**OAS:**

*Time 1 OAS*

Total: COMPUTE: toas1 = 18*mean.15(aoas1 to aoas18) .

EXECUTE .

**ISS:**

*Time 1 ISS*

Self Esteem: COMPUTE:

tisse1 = 6*mean.5(aiss4,aiss9,aiss14,aiss18,aiss21,aiss28) .

EXECUTE .

Shame: COMPUTE:

tiss1=24*mean.18(aiss1,aiss2,aiss3,aiss5,aiss6,aiss7,aiss8,aiss10,aiss11,aiss12,aiss13,aiss15,aiss16,aiss17,aiss19,aiss20,aiss22,aiss23,aiss24,aiss25,aiss26,aiss27,aiss29,aiss30)  .

EXECUTE .

**SCS:**

* Time 1 - SCS *

Self Compassion: COMPUTE:
scomp1=13*mean.10(ascs3,ascs5,ascs7,ascs9,ascs10,ascs12,ascs14,ascs15,ascs17,ascs19,ascs22,ascs23,ascs26).

EXECUTE .

Self Coldness: COMPUTE:
scold1=13*mean.10(ascs1,ascs2,ascs4,ascs6,ascs8,ascs11,ascs13,ascs16,ascs18,ascs20,ascs21,ascs24,ascs25).

EXECUTE .

**FSCSC:**

* Time 1 - FSCSC *

Self Correction: COMPUTE:
fscsc1=13*mean.10(afscs1,afscs3,afscs5,afscs7,afscs11,afscs12,afscs14,afscs15,afscs16,afscs17,afscs18,afscs19,afscs20).

EXECUTE .

Self Persecution: COMPUTE:

fscsp1 = 8*mean.6(afscs2,afscs4,afscs6,afscs8,afscs9,afscs10,afscs13,afscs21).

EXECUTE .

**FSCRS:**

* Time 1 - FSCRS*

Inadequate Self: COMPUTE:
fscrsis1=9*mean.7(afscrs1,afscrs2,afscrs4,afscrs6,afscrs7,afscrs14,afscrs17,afscrs18,afscrs20).

EXECUTE .

Reassure Self: COMPUTE:

fscrsrs1 = 8*mean.6(afscrs3,afscrs5,afscrs8,afscrs11,afscrs13,afscrs16,afscrs19,afscrs21) .

EXECUTE .

Hated Self: COMPUTE:

fscrshs1 = 5*mean.4(afscrs9,afscrs10,afscrs12,afscrs15,afscrs22).

EXECUTE .

**All computes were then repeated for each identified time points.**

## Glossary of Terms

**Compassion:**

Deep awareness of the suffering of another, coupled with the wish to relieve it.

**Ego-Syntonic:**

Psychological term referring to behaviours, values and feelings that are in harmony with or acceptable to the needs and goals of the ego.

**Transdiagnostic:**

Transdiagnostic approach recognises that many overlapping or common dimensions exist in eating disorders, and rather than treating them within a singular diagnosis, treating them as a whole provides important insights.

**Compassion Focused Therapy (CFT):**

CFT is an integrated and multimodal approach that draws from evolutionary, social developmental and Buddhist psychology and neuroscience. It helps people develop inner warmth, safeness and self compassion.

**Therapeutic Intervention:**

Therapeutic intervention refers to a type of intervention that is designed to heal the person suffering from the condition. Usually therapeutic intervention is performed by professionals and it is designed to effect change in a way that restores the health of the person.

**Cognitive Behavioural Therapy (CBT):**

CBT is a technique that can be used to help people better understand the thoughts and feelings that lead to potentially problematic behaviours. CBT has a range of uses, but it can be particularly effective in treating phobia's, anxiety, addictions and depression.

**Eating Disorders:**

Eating disorders are characterised by an abnormal attitude towards food that causes someone to change their eating habits and behaviour.

**Outpatient Treatment:**

Patients who can be treated in a community setting.

**Group Therapy:**

A form of psychosocial treatment where a small group of patients meet regularly to talk, interact and discuss problems with each other and the group leaders (therapists).